

Teach Yourself **VISUALLY™** **Adobe® Photoshop® Lightroom® 2**



*The Fast
and Easy Way
to Learn*

Teach Yourself

VISUALLY™

Adobe® Photoshop® Lightroom® 2



by Lynette Kent



Wiley Publishing, Inc.

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"What fantastic teaching books you have produced! Congratulations to you and your staff. You deserve the Nobel Prize in Education in the Software category. Thanks for helping me understand computers."

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"Over time, I have bought a number of your 'Read Less - Learn More' books. For me, they are THE way to learn anything easily. I learn easiest using your method of teaching."

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Lynette Kent (Huntington Beach, CA) studied art and French at Stanford University. After completing her master's degree, she taught at both the high school and community college level. A fervent Mac user since 1987 and unconventional computer person, she now teaches and writes books and magazine articles on digital imaging and photography, and often presents computer graphics hardware and software at trade shows. She enjoys photography as well as painting with traditional watercolors, and often combines both arts using the computer. Her books include *Teach Yourself VISUALLY Mac OS X Leopard*, *Adobe Photoshop CS3: Top 100 Simplified Tips & Tricks*, and *Teach Yourself VISUALLY Digital Photography*, 3rd Edition. Lynette is also one of the leaders of the Adobe Technology Exchange of Southern California, a professional organization for photographers, graphic designers, and fine artists.

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Table of Contents

chapter 1

Introducing Photoshop Lightroom

Understanding Lightroom	4
Understanding Lightroom's Structure	6
Using the Lightroom Interface	8
Open Lightroom and Click the Modules	10
Enlarge the Central Viewing Area	12
Create a Practice Lightroom Catalog	14
Locate the Practice Lightroom Catalog	16
Remove the Photos from the Practice Catalog	18



chapter 2

Getting Your Photos into Photoshop Lightroom

Understanding Lightroom Catalogs and Image Storage	22
An Overview of Lightroom's Import Process	24
Understanding File Formats	26
Import Photos at Their Current Location	28
Import Photos from a Memory Card	30
Import Photos and Change Format to DNG	32
Be Consistent with File Names	34
Import Photos and Change Names	36
Rename Photos after Importing	37
Understanding Lightroom's Naming Template Presets	38
Create Your Own Naming Template Preset	40
Create a New Catalog	44
Import Photos from an Existing Catalog	46
Automate the Import Process	48
Back Up During Import	50
Build a Lightroom Library with External Drives	52
Combine a Travel Catalog with Your Main Lightroom Library	56



chapter 3

Viewing and Organizing Your Photos

Locate the Parts of the Library Module	60
Change the Library Views	64
Using a Second Window	66
Adjust the Lights	70
Change the Display of the Side Panel Sections	71
Change Your Library View Options	72
Customize the Library Toolbar	74
Rename a Group of Photos	76
Tag Your Photos for Easier Sorting	78
Filter Your Photos	80
Organize Your Photos with Folders	82
Synchronize Folders That Have Changed	84
Group Your Photos into Collections	86
Create a Smart Collection	88
Group Collections into a Collection Set	90
Make a Quick Collection	92
Convert a Quick Collection to a Permanent Collection	94
Add Keywords to Your Photos	96
Add Keywords with the Painter Tool	98
Create Custom Keyword Sets and Hierarchical Lists	100
Create an Image Stack	102
Remove or Delete Photos from Lightroom	104



Table of Contents

chapter

4

Personalizing Lightroom

Understanding Lightroom Presets	108
Set the Essential Lightroom Preferences	110
Customize the Catalog Settings	114
Quickly Change Your Lightroom View	116
Understanding Metadata	118
Apply Metadata in the Library Module	120
Synchronize Metadata between Photos	122
Create a Copyright Metadata Preset	124
Design a Personal Identity Plate	126
Modify the Module Buttons	128
Create a Graphical Identity Plate	130



chapter

5

Setting the Stage for Digital Photo Developing

Focus on Your Monitor	134
Understanding Monitor Calibration Options	136
Calibrate and Profile Your Monitor	138



chapter 6

Using the Library Module for Quick Developing

Understanding the Histogram	144
Alter the Photo with a Preset	146
Crop Your Photo with a Preset	147
Make a Quick Change to Grayscale	148
Quickly Select a Different White Balance	149
Fine Tune the White Balance Setting	150
Modify an Auto Tone Change	152
Understanding Library Module Clarity and Vibrance Tools	154
Improve the Photo with Clarity and Vibrance	155
Synchronize a Quick Develop Setting for Multiple Images	156
Create Virtual Copies to Compare Edits	158



chapter 7

Exploring the Develop Module

Locate the Parts of the Develop Module	162
Change the Develop Module Interface	164
Try the Develop Module Shortcuts	166
Using the Develop Module Presets	168
Compare Images in the Develop Module	170
Using the Image History and Snapshot	172
Rotate a Photo in the Develop Module	176
Copy and Paste Edits from One Photo to Another	177
Using the Histogram Features in the Develop Module	178
Straighten Images	180
Recompose Your Photo with a Crop	182
Creatively Crop an Image for Effect	184
Repair Dust Spots and Other Imperfections	186
Remove Red Eye	188

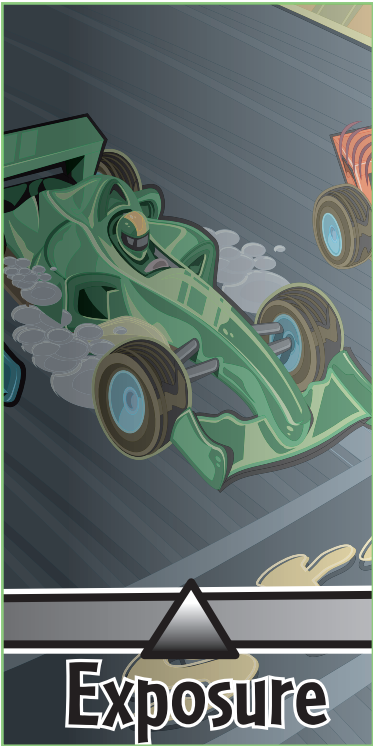


Table of Contents



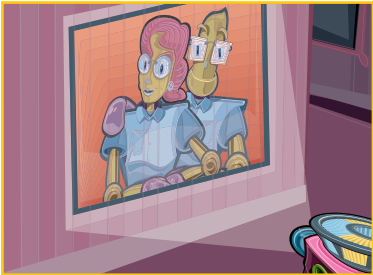
Image Processing in the Develop Module

Adjust the White Balance	192
Modify the Basic Exposure	196
Make Precise Changes with the Tonal Adjustments Tools	198
Improve the Photo with Clarity, Vibrance, and Saturation	200
Make Controlled Tone Curve Adjustments	202
Explore the HSL/Color/Grayscale Tools	206
Adjust Individual Color Ranges	208
Creatively Convert a Color Image to Black and White	210
Tone an Image	212
Brush On a Localized Adjustment	214
Add a Localized Graduated Filter	218
Reduce Digital Noise in the Image	220
Decrease Chromatic Aberration	222
Improve Details with Sharpening	224
Add a Lens Vignette for Effect	226
Save Your Settings as a Custom Preset	228
Understanding the Camera Calibration Feature	230
Using the Camera Calibration Pane	232



Making Slideshows Look Professional with Lightroom

Locate the Parts of the Slideshow Module	236
Play an Impromptu Slideshow	238
Create a Basic Slideshow with a Slideshow Template	240
Customize an Existing Lightroom Slideshow Template	242
Add Customized Text Overlays to a Slideshow	246
Save a Custom Slideshow Template	248
Export a Slideshow to PDF	249



chapter 10

Printing from Photoshop Lightroom

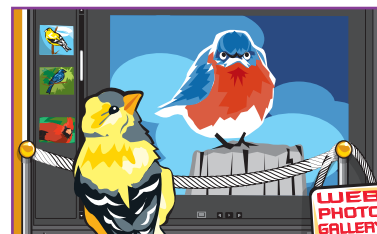
Locating the Parts of the Print Module	252
Using a Lightroom Template to Prepare One Photo to Print	254
Print a Contact Sheet	256
Add Overlay Text or Graphics to Prints	258
Customize and Save an Existing Lightroom Print Template	262
Prepare a Picture Package for Printing	266
Create a Custom Picture Package	268
Understanding the Color Management Options	270



chapter 11

Creating Web Galleries with Your Photos

Locating the Parts of the Web Module	274
Using a Template to Create a Web Gallery	278
Customize a Web Gallery Template	280
Managing Your Custom Web Gallery Templates	284
Export Your Web Gallery	286
Upload Your Web Gallery to a Web Site	288



chapter 12

Using Photoshop or Elements with Lightroom

Understanding the Differences between Lightroom and Bridge	292
Understanding the Differences between Lightroom and Photoshop or Elements	294
Set Lightroom's Preferences for the External Editors	296
Take a Raw or DNG File from Lightroom to Photoshop and Back	298
Take an Image from Lightroom to Photoshop or Elements and Back	300
Go from Lightroom to Photoshop to Create a Panorama	302

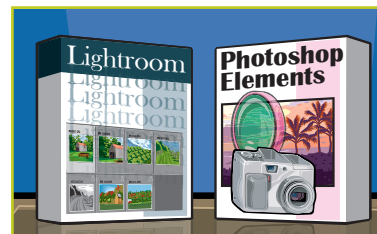


Table of Contents



Exporting Photos for Multiple Uses

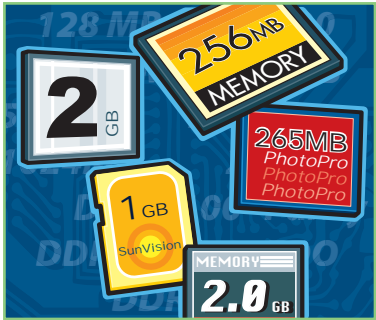
Understanding the Lightroom Export Feature	306
Explore the Export Dialog Box Settings	308
Create an Export Preset to Attach Photos to Your E-mail	310



chapter 14

Best Practices for Memory Cards and Storage

Understanding Memory Cards and Memory Card Readers	316
Using Memory Cards Correctly	318
Differentiating between Storage, Backups, and Archives	320
Understanding External Hard Drives.....	322
Defining Multidrive and RAID Systems	324
Protecting Your Hard Drives.....	325
Understanding Travel Essentials with a Digital Camera.....	326
Using an Online Storage System.....	328



How to use this book

Do you look at the pictures in a book or newspaper before anything else on a page? Would you rather see an image instead of read about how to do something? Search no further. This book is for you. Opening *Teach Yourself VISUALLY Adobe Photoshop Lightroom 2* allows you to read less and learn more about the Lightroom.

Who Needs This Book

This book is for a reader who has never used this particular technology or software application. It is also for more computer literate individuals who want to expand their knowledge of the different features that Lightroom has to offer.

Book Organization

Teach Yourself VISUALLY Adobe Photoshop Lightroom 2 has 14 chapters.

Chapter 1, **Introducing Photoshop Lightroom**, introduces the Lightroom organization and interface and helps you locate the tools you will use. It also steps you through creating a practice catalog to get familiar with the Lightroom concept.

In Chapter 2, **Getting Your Photos into Photoshop Lightroom**, you learn about the Lightroom Import process. It includes a variety of different import scenarios so you can bring photos into Lightroom from a memory card, an external drive, or the current drive and more.

Chapter 3, **Viewing and Organizing Your Photos**, guides you through different ways of viewing your photos onscreen and the many ways to sort and group your images. You can add keywords, colored tags star ratings, and more to customize your photo collection.

Chapter 4, **Personalizing Lightroom**, gives you an overview of the Lightroom preferences and ways to customize the application so it works for you.

Chapter 5, **Setting the Stage for Digital Photo Developing**, explains the basics of color calibration and profiling and why this is an essential part of digital photo editing. It includes a step-by-step task on how to calibrate and profile your monitor.

Chapter 6, **Using the Library Module for Quick Developing**, teaches you some easy tools to edit photos using the basic Lightroom adjustments.

Chapter 7, **Exploring the Develop Module**, introduces you to the main photo editing tools in Lightroom, and teaches the location of all the tools. It covers cropping and straightening, as well as red-eye and dust repair.

Chapter 8, **Image Processing in the Develop Module**, teaches the basics of the white balance and tonal adjustment tools, sharpening, and vignetting. The tasks also show how to use the localized adjustment tools for making specific rather than global changes.

Chapter 9, **Making Slideshows Look Professional with Lightroom**, guides you through the quick and easy of building a simple yet personalized slideshow of your images.

Chapter 10, **Printing from Photoshop Lightroom**, gives an overview of the print module tools and teaches some of the many ways to send your photos to a printer directly from Lightroom.

Chapter 11, **Creating Web Galleries with Your Photos**, explains how to put your images on the web in a gallery style of your own design.

Chapter 12, **Using Photoshop or Elements with Lightroom**, explains the differences between Lightroom and these two photo editing tools, and when and how to use them in conjunction with Lightroom.

In Chapter 13, **Exporting Photos for Multiple Uses**, you learn Lightroom's method and reasons for exporting from the application.

Chapter 14, **Best Practices for Memory Cards and Storage**, includes valuable explanations and information about the many ways to keep your digital photo files when you are working on them and for archiving them. This chapter is a basic overview of the hardware options currently available for the safekeeping of your images.

Chapter Organization

This book consists of sections, all listed in the book's table of contents. A *section* is a set of steps that show you how to complete a specific computer task.

Each section, usually contained on two facing pages, has an introduction to the task at hand, a set of full-color screen shots and steps that walk you through the task, and a set of tips. This format allows you to quickly look at a topic of interest and learn it instantly.

Chapters group together three or more sections with a common theme. A chapter may also contain pages that give you the background information needed to understand the sections in a chapter.

What You Need to Use This Book

To install Lightroom, you need a Macintosh PowerPC G4 or G5 or Intel Based Mac, with system 10.4 or 10.5, or

an Intel Pentium 4 processor with Windows XP service Pack 2 or Windows Vista, plus a minimum of 768 MB or RAM, at least 1 GB of available hard disk space, a monitor with a screen resolution of 1024 x 768 or greater, and a CD-ROM drive.

To perform the tasks in this book, you need digital photos on a computer, an external hard drive, or on a memory card with a card reader. At least one external hard drive is recommended, as is a Wacom tablet and pen.

Using the Mouse

This book uses the following conventions to describe the actions you perform when using the mouse:

Click

Press your left mouse button once. You generally click your mouse on something to select something on the screen.

Double-click

Press your left mouse button twice. Double-clicking something on the computer screen generally opens whatever item you have double-clicked.

Right-click

Press your right mouse button. When you right-click anything on the computer screen, the program displays a shortcut menu containing commands specific to the selected item.

Click and Drag, and Release the Mouse

Move your mouse pointer and hover it over an item on the screen. Press and hold down the left mouse button. Now, move the mouse to where you want to place the item and then release the button. You use this method to move an item from one area of the computer screen to another.

The Conventions in This Book

A number of typographic and layout styles have been used throughout *Teach Yourself VISUALLY Adobe Photoshop Lightroom 2* to distinguish different types of information.

Bold

Bold type represents the names of commands and options that you interact with. Bold type also indicates text and numbers that you must type into a dialog box or window.

Italics

Italic words introduce a new term and are followed by a definition.

Numbered Steps

You must perform the instructions in numbered steps in order to successfully complete a section and achieve the final results.

Bulleted Steps

These steps point out various optional features. You do not have to perform these steps; they simply give additional information about a feature.

Indented Text

Indented text tells you what the program does in response to you following a numbered step. For example, if you click a certain menu command, a dialog box may appear, or a window may open. Indented text may also tell you what the final result is when you follow a set of numbered steps.

Notes

Notes give additional information. They may describe special conditions that may occur during an operation. They may warn you of a situation that you want to avoid, for example the loss of data. A note may also cross reference a related area of the book. A cross reference may guide you to another chapter, or another section with the current chapter.

Icons and buttons

Icons and buttons are graphical representations within the text. They show you exactly what you need to click to perform a step.



You can easily identify the tips in any section by looking for the TIPS icon. Tips offer additional information, including tips, hints, and tricks. You can use the tip information to go beyond what you have learned in the steps.

Operating System Difference

The screenshots in this book were taken on a Macintosh computer. Some dialog boxes show OK on a PC where the Macintosh dialog boxes show Create. Preferences are listed under the Edit menu on a PC instead of under the Lightroom menu on a Mac. Everything functions the same way on both systems.

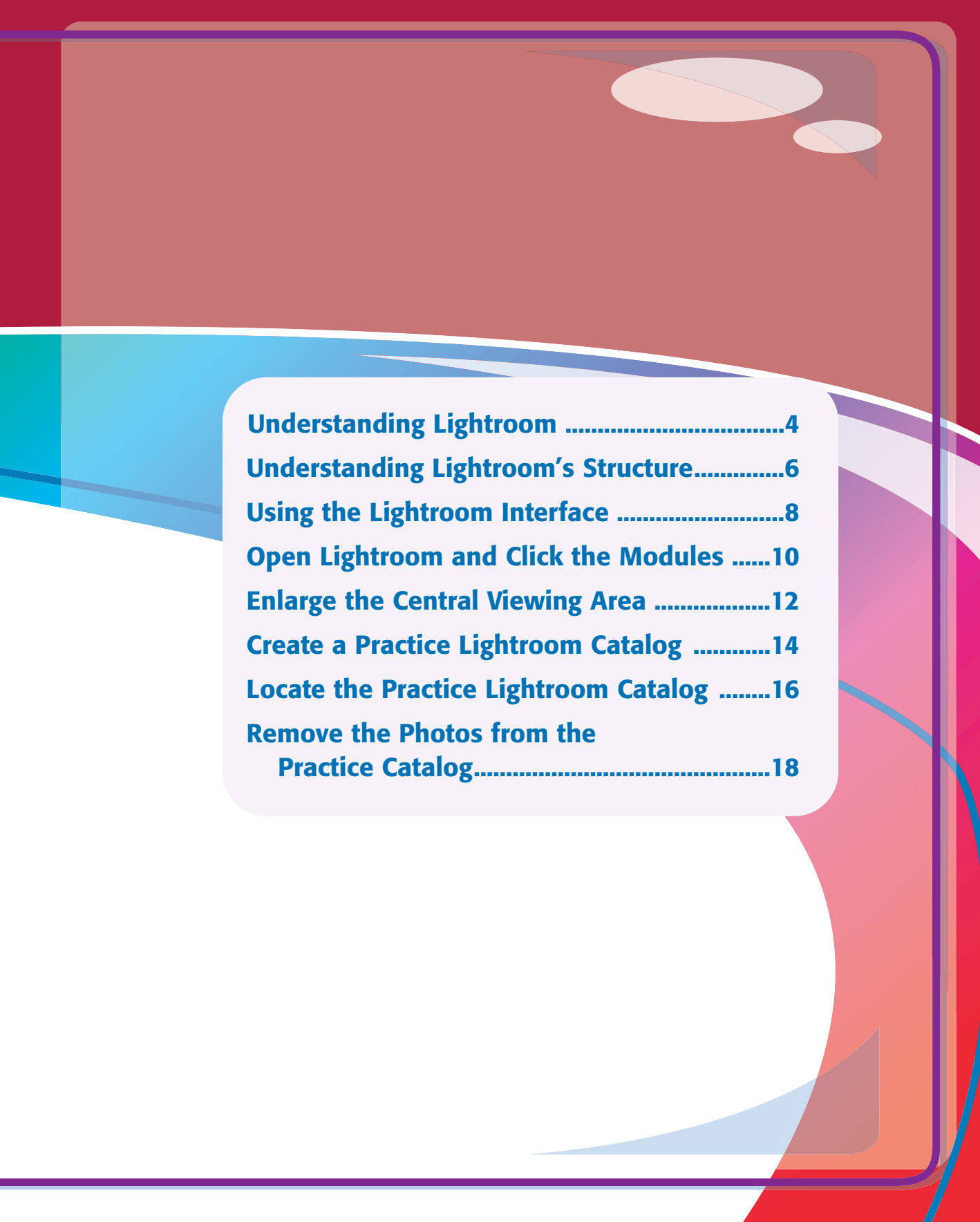
CHAPTER

1

Introducing Photoshop Lightroom



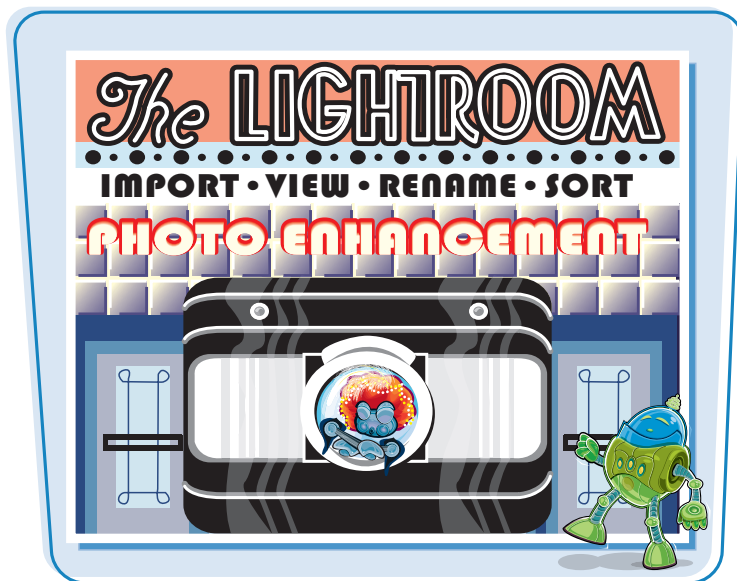
Adobe designed Photoshop Lightroom to help professional photographers manage and edit large numbers of images in a simplified photographic workflow. Lightroom's streamlined interface and modular approach also allow photographers of all skill levels to use this new digital darkroom to organize, edit, and display their photos.



Understanding Lightroom	4
Understanding Lightroom's Structure.....	6
Using the Lightroom Interface	8
Open Lightroom and Click the Modules	10
Enlarge the Central Viewing Area	12
Create a Practice Lightroom Catalog	14
Locate the Practice Lightroom Catalog	16
Remove the Photos from the Practice Catalog.....	18

Understanding Lightroom

Adobe Photoshop Lightroom is a virtual darkroom and includes a digital version of traditional photographic darkroom tools. You can use Lightroom to import your photos from the camera's memory into the computer and view, rename, and sort them in a variety of ways. You can then use Lightroom to enhance the colors and tone, crop, and more without ever changing the original image. In addition, Lightroom helps you design the style of print layouts and create slide shows and Web galleries to display your photos.



Lightroom Is Perfect for All Photographers

Adobe designed Photoshop Lightroom for professional photographers so they could spend more time with the camera and less time working with their photos on the computer. By simplifying the way the pros work with their images, Lightroom also makes it easier for all types of photographers to organize, edit, and show their photos.



Lightroom Is a Database

Like any other database, Lightroom enables you to organize a large collection of images and information about those images to help you find specific ones quickly and easily. Lightroom automatically enters information about each photo when it is imported. You add information to the database as you rate, sort, and enhance each image.

	Max	★★★★
	Bailey	★★★
	Buddy	★★
	Molly	★★★
	Lucy & Daisy	★

Lightroom Is an Organizational Tool

Lightroom enables you to view all your photos on a digital light table, scrolling through your entire photo collection at once. You can select individual images or groups of images, assign ratings, separate them into folders, or reorganize them into special collections, all so you can find your photos quickly. The viewing options enable you to easily compare two or more images or view an image at full size or a variety of sizes.



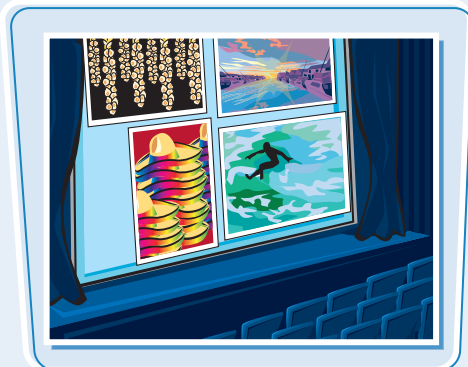
Lightroom Is a Digital Photo Developing Tool and a Photo Editing Tool

Lightroom replaces the chemicals and enlarger of the traditional darkroom with digital developing tools. You can adjust colors and tone, crop and straighten, even convert color to grayscale with immediate visual results. All changes are non destructive, meaning Lightroom never changes the actual pixels in the photo. Instead, it adds the changes you make to the database, like a set of instructions on how you want the image to appear. You can always revert to the original photo file.



Lightroom Is for Presenting Your Photos

You can use Lightroom to set up your print options for any number of photos, or quickly create and play a slide show with a musical background. You can even use Lightroom to create a Web Gallery, ready to upload to a Web site. Lightroom includes a number of templates for all types of presentations, and also enables you to create your own custom layouts.



Lightroom Is Designed to Work with Photoshop or Photoshop Elements

Lightroom does not replace Photoshop or Photoshop Elements. You can use Lightroom alone or in conjunction with one of these applications. You can import, organize, and edit images in Lightroom and then seamlessly adjust them further using Photoshop or Elements for pixel-level enhancements, before bringing the photos back into Lightroom to reorganize, print, or create a slide show or a Web gallery.



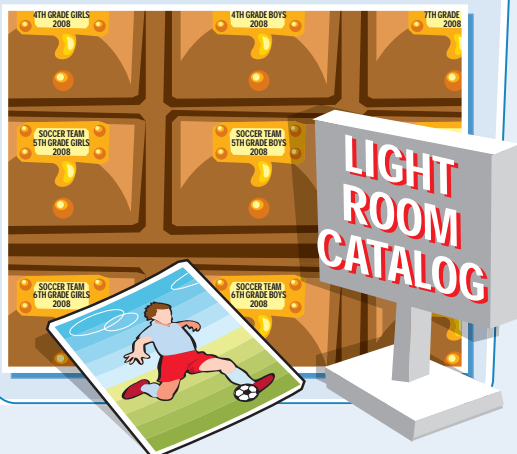
Understanding Lightroom's Structure

Lightroom is intended to streamline the digital photographic workflow of downloading the images from a camera and sorting, developing, and sharing them. Lightroom includes many options to accommodate the organizational requirements of all types of photographers. This flexibility can also be confusing to the new user. Understanding Lightroom's structure before you import your photos, and planning where you will store them and the catalog, are important first steps.



The Lightroom Catalog

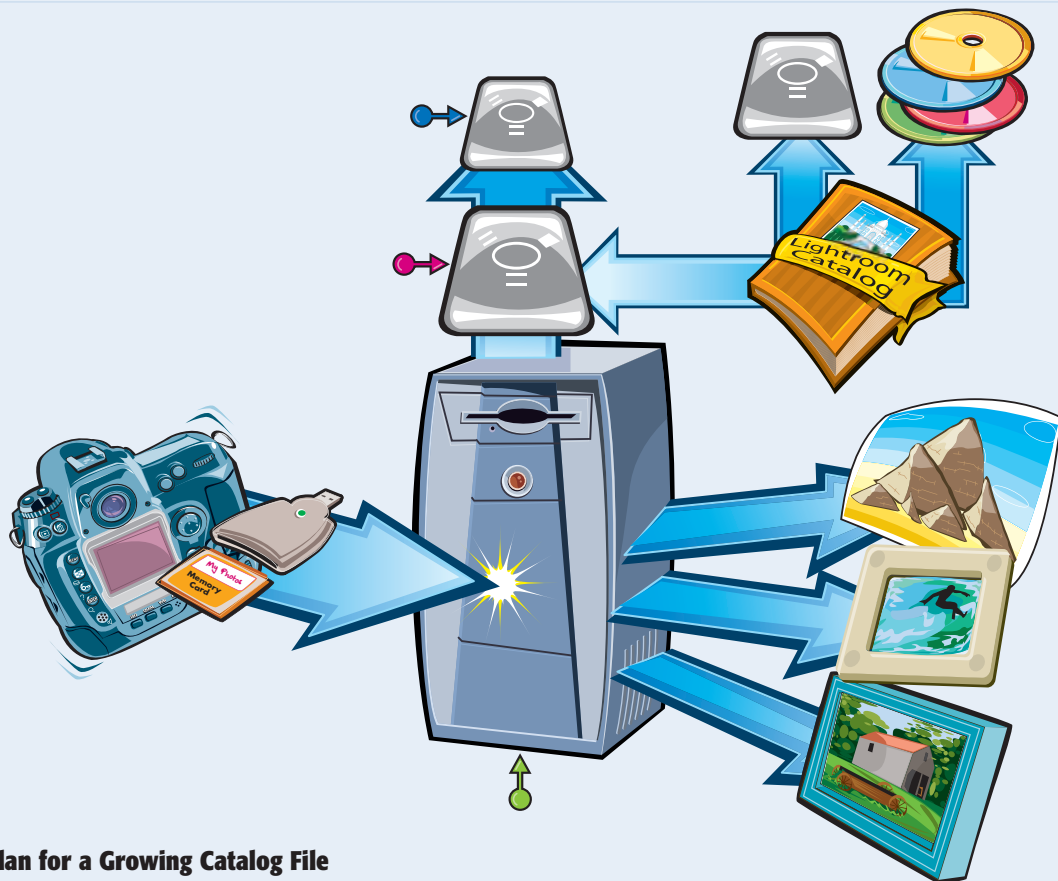
A Lightroom catalog of photo files functions like a card catalog of books from a public library. The catalog contains specific information about each image and where it is located.



Your Photo Collection

Your entire image collection corresponds to the public library building itself. It includes all your photos, like the building stores the books. The individual photo files may not necessarily be in the same building as the catalog. When you are in Lightroom's Library module, you can view all the images in your photo collection.





- **Plan for a Growing Catalog File**

Your photo collection requires more storage space as you take and import more digital photos. The size of both the Lightroom Catalog Previews.lrdata file and the Lightroom Catalog.lrcat file also get larger as you import more photos into Lightroom.

- **Use Additional Internal or External Hard Drives**

You can store your photo files as well as the Lightroom catalog and previews on an external hard drive. See Chapter 2 to create a Lightroom catalog in a location other than your computer's main hard drive. See Chapter 14 for information on hard drives.

- **Back Up Your Photo Files and Lightroom Catalog**

You should also plan to back up your digital photo files and your Lightroom catalog regularly. Because hard drives have a limited lifespan, you should maintain a complete backup or duplicate of your photo files on at least one, preferably two separate hard drives. You can copy the files manually or you can use automated back-up software, such as Intego's Personal Back Up for Mac or NTI Shadow for either Mac or PC. You can also make an archive duplicate of your photo files by burning the files to DVD media.

Using the Lightroom Interface

The Lightroom interface is designed to help you focus on your photos at all times, from the general layout, which remains constant throughout the various stages in your photo processing, to the neutral gray and black color scheme, which prevents distracting influences in color perception. Although it may appear daunting at first, Lightroom's interface is very logical and intuitive.



● **Lightroom main menu bar**

The Lightroom main menu bar, as for any other application, includes all the menu options for the open window.

● **Top panel**

The top panel includes the Identity Plate on the left and the Module Picker on the right. The Identity Plate is used for customizing your Lightroom interface, and the Module Picker enables you to change the tools depending on the editing tasks.

● **Central viewing area**

The central content area is for viewing your images. Depending on the module you are in, your photos will appear in Grid Mode with thumbnails in a grid layout, in Loupe mode with one image, or you will see a preview of your print, slide show, or Web gallery page layout.

● **Toolbar**

The Lightroom toolbar displays different types of tools depending on the module you have selected.

● **Left panel**

The left panel contains the tools that relate to viewing content for the open module, such as the folder hierarchy, collections, history, presets, and templates.

● **Right panel**

The right panel contains the organizing and editing tools for the open module, such as key words, image processing, and customizing templates.

● **Filmstrip**

The Filmstrip is constant and shows the thumbnails of the images of the selected folder or collection so you can access the images from any module.

A Consistent Interface

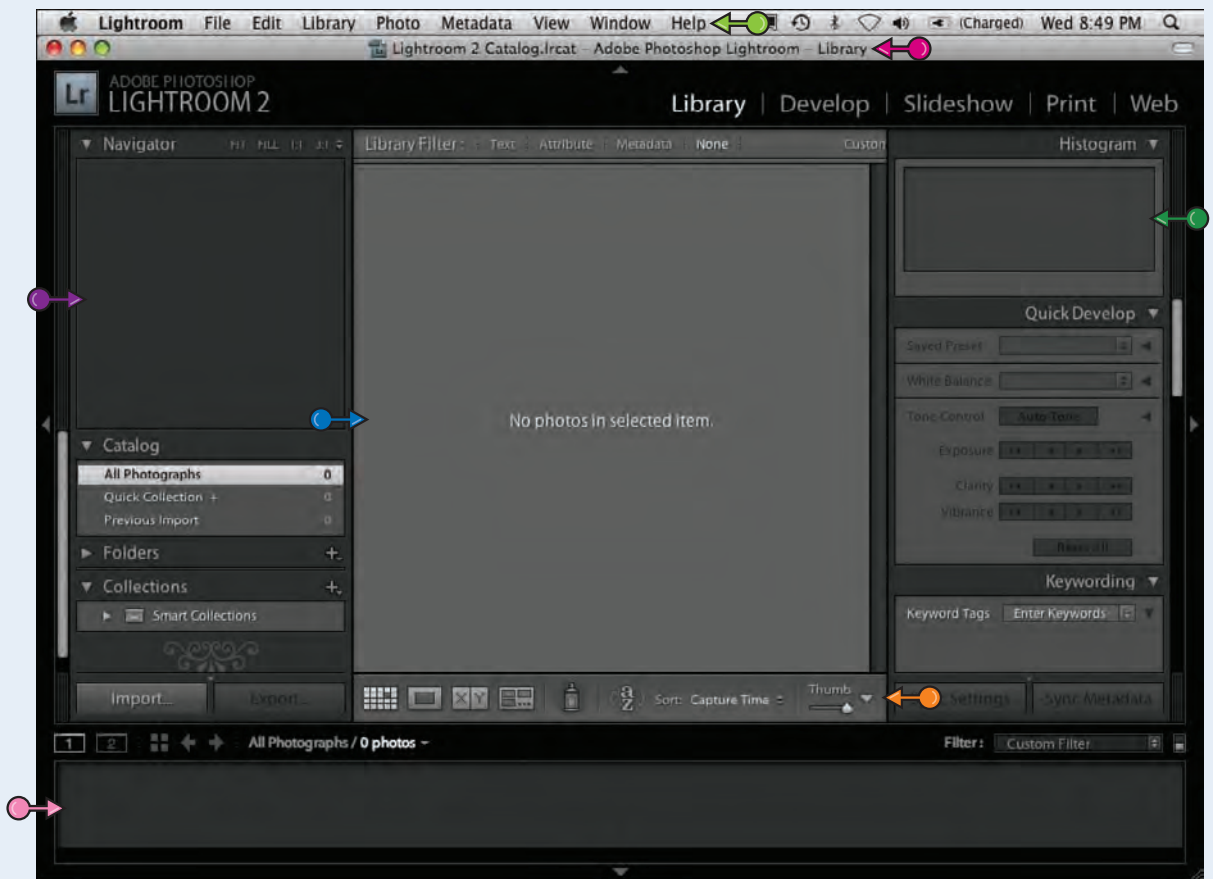
Although the contents and tools of the individual panels change as you click through the different modules, the panel arrangement and overall interface remain constant throughout.

A Customizable Interface

You can modify the general layout, as shown in the tasks in this chapter, to focus on the central viewing area by hiding the left panel, the right panel, or both. You can also hide any of the other panels to expand the main viewing area. The central viewing area is the only panel you cannot hide. The surrounding panels and the options and tools for the central viewing area differ from module to module.

A Platform Independent Interface

Lightroom's interface appears the same whether you use a Macintosh or a Windows computer. The only differences are those related to the operating system itself. For example, Lightroom's preferences are located under the Lightroom menu on a Mac and under the Edit menu on a PC; the menu bar is at the top of the main screen on a Mac and under the application title bar on a PC.



Open Lightroom and Click the Modules

Lightroom's main interface automatically fills your screen area. Despite the seemingly complex main window, Lightroom is a very logical tool for organizing and developing digital photographs. Lightroom's modular design guides you through the steps for digital photo processing and still remains flexible. You can quickly become familiar with the Lightroom interface and photo developing tools by clicking the modules.



Open Lightroom and Click the Modules

1 Launch Lightroom.

The first time you open Lightroom, six welcome screens appear in succession.

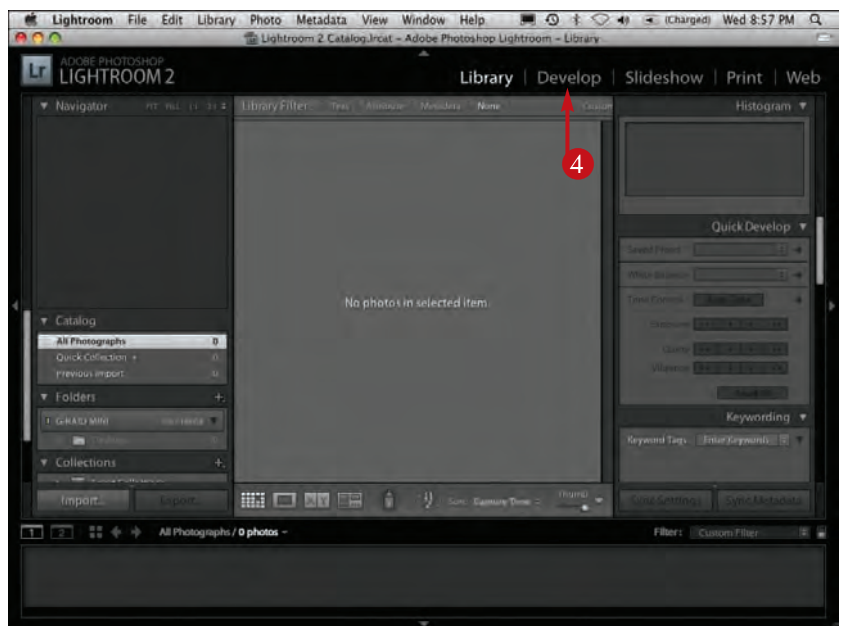
2 Click **Next** to view each welcome screen.

3 Click **Finish** to close the welcome screens.



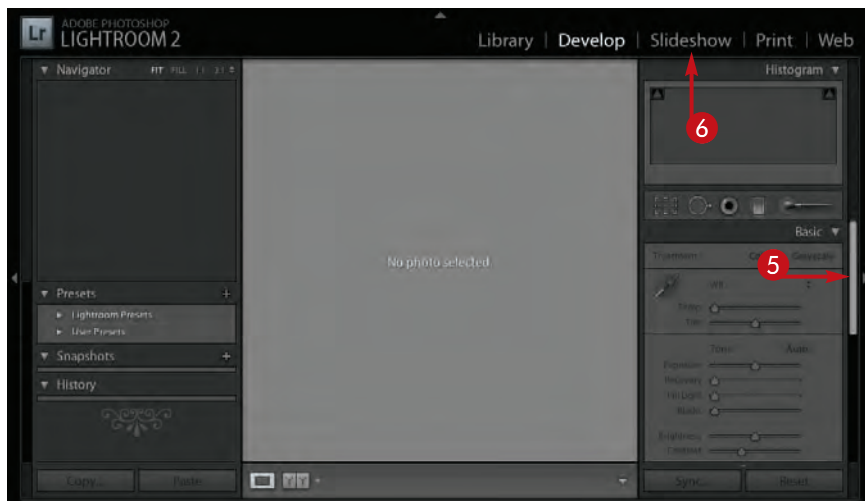
The main Lightroom window appears with the Library module highlighted.

4 Click **Develop** in the top panel.



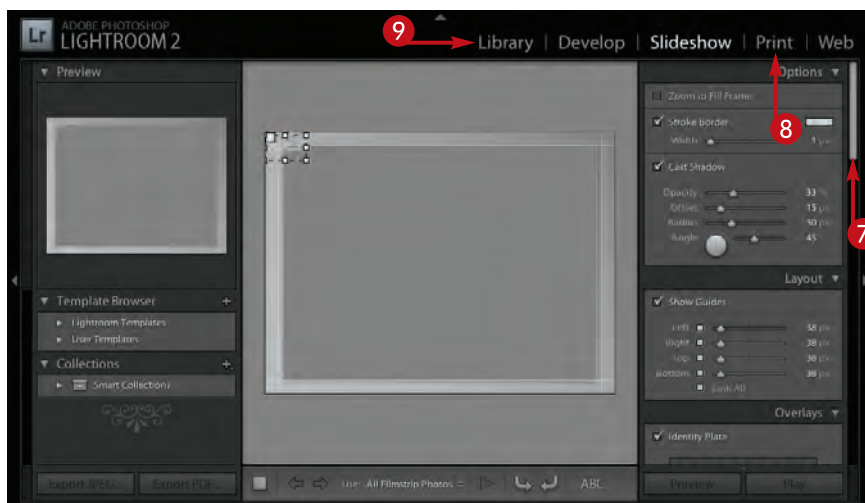
The Develop module panels and toolbar appear.

- 5 Scroll down to see more of the Develop module's right panel.
- 6 Click **Slideshow** in the top panel.



The Slideshow module panels and toolbar appear.

- 7 Scroll down to see more of the Slideshow module's left and right panels.
- 8 Click **Print** and **Web** in the top panel to explore those modules' panels.
- 9 Click **Library** in the top panel to return to the main Library module.



TIPS

How can I reopen the welcome screens?

When you first install and launch Lightroom, the Five Rules welcome screens appear. You can reopen these at any time if you forgot to read them. Click **Help** in the main menu bar and click **The Five Rules**. When using Lightroom, always remember rule number five – Enjoy.



Why are there two listings for help under the Help menu?

Help for the Lightroom application in general is always at the top of the list under the Help menu. Each module also lists a targeted help selection for that module, along with the specific shortcuts for that particular module, so you can quickly find a topic or a shortcut for that module without having to read through the Help for the entire application.



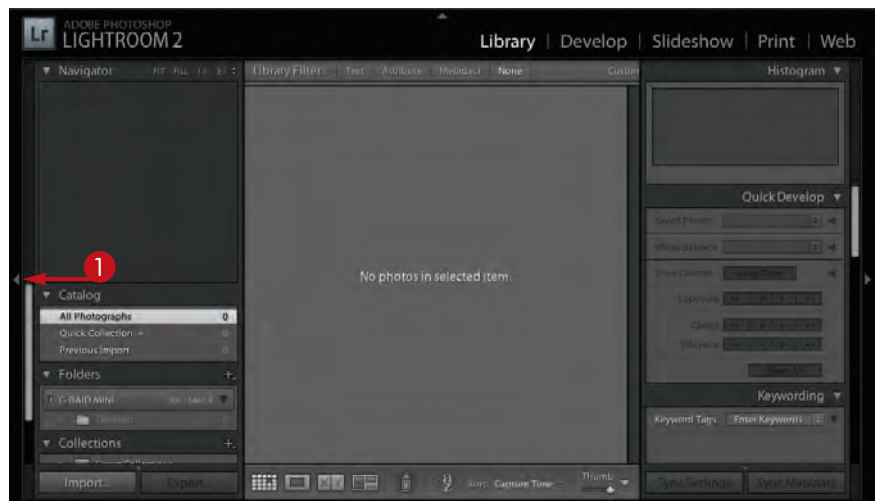
Enlarge the Central Viewing Area

Lightroom enables you to temporarily hide and show the various panels so you can make the central viewing area larger to focus on your photos. You can hide one or all the panels at one time. You can also make some panels *sticky* or more permanent while others reappear only when you want them to.



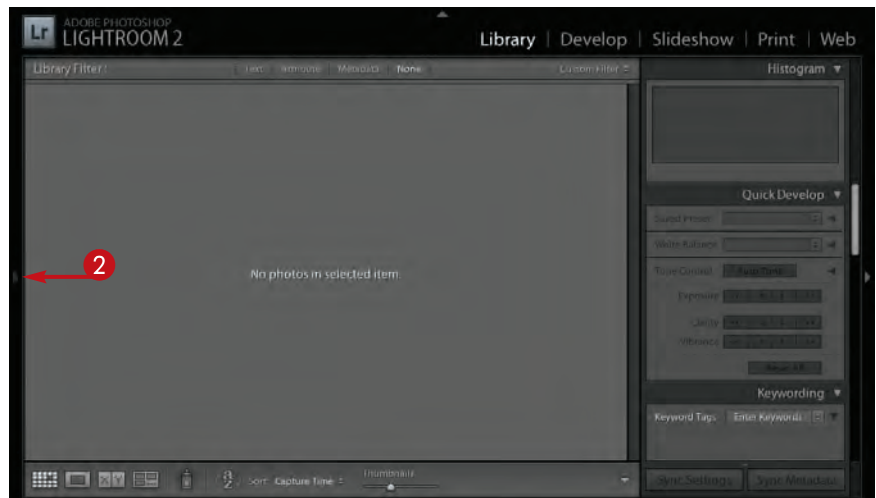
Enlarge the Central Viewing Area

- 1 Click the left panel triangle (▢) in the Library module.



The left panel disappears and the solid triangle changes to a dotted triangle (▤) changes to ▢).

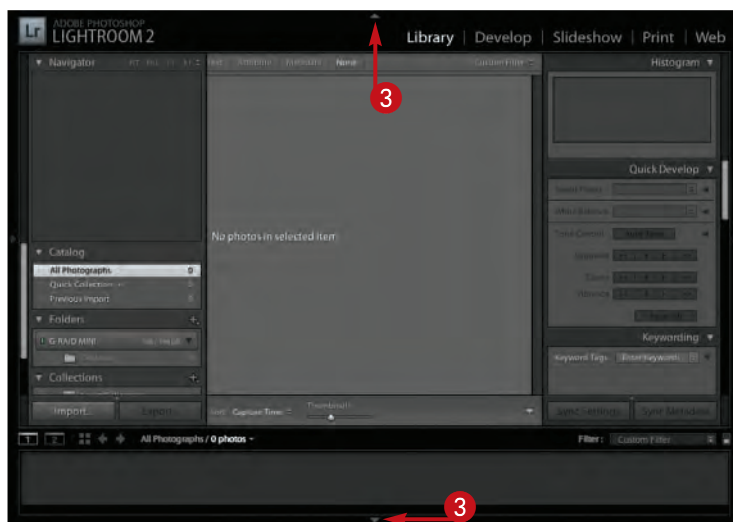
- 2 Position the cursor over the dotted triangle (▤).



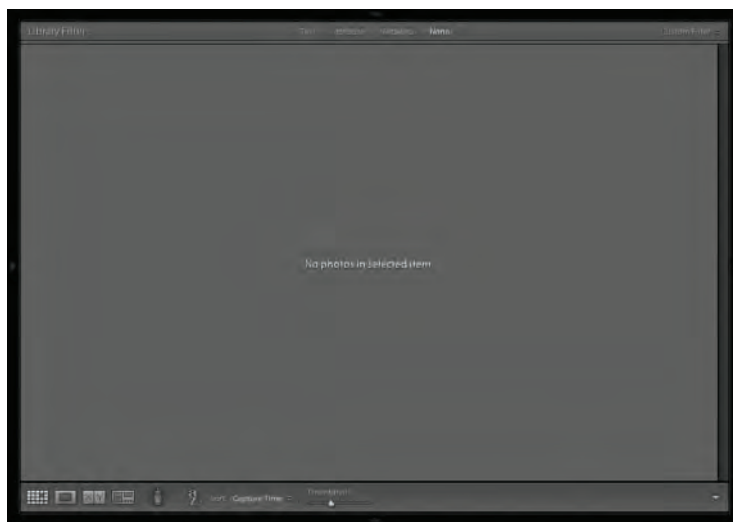
The left panel reappears temporarily. The triangle remains dotted.

Note: When you click the triangle again, it turns solid.

- 3 Repeat Steps 1 and 2 with each of the other three triangles – top, right, and bottom (▲, ▼, and ▼).



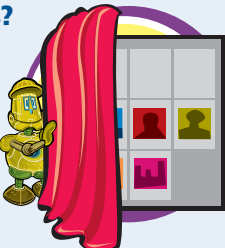
The top panel, right panel, and the Filmstrip disappear individually, and the central viewing area adjusts to fill the majority of your screen.



TIPS

Is there a keyboard shortcut to hide and show the panels?

Yes. Press **F7** to hide and show the left panel and press **F8** to hide and show the right panel. Press **Tab** to alternately hide and show the side panels. Press **F5** to hide and show the top panel. Press **F6** to hide and show the Filmstrip and Filmstrip toolbar.



Are there keyboard shortcuts to hide and show the toolbar or all the panels at once?

Yes. Press **T** to hide and show the toolbar. Press **Shift+Tab** to hide and show all the panels.



Create a Practice Lightroom Catalog

Unlike software applications that focus on one image or one project at a time, Lightroom builds a continually expanding library of your photos. Understanding where Lightroom stores the photo and data files is essential to creating a logical database of images. You can create a practice catalog with several images and then view the location and file types before you start building your photo library and Lightroom database.



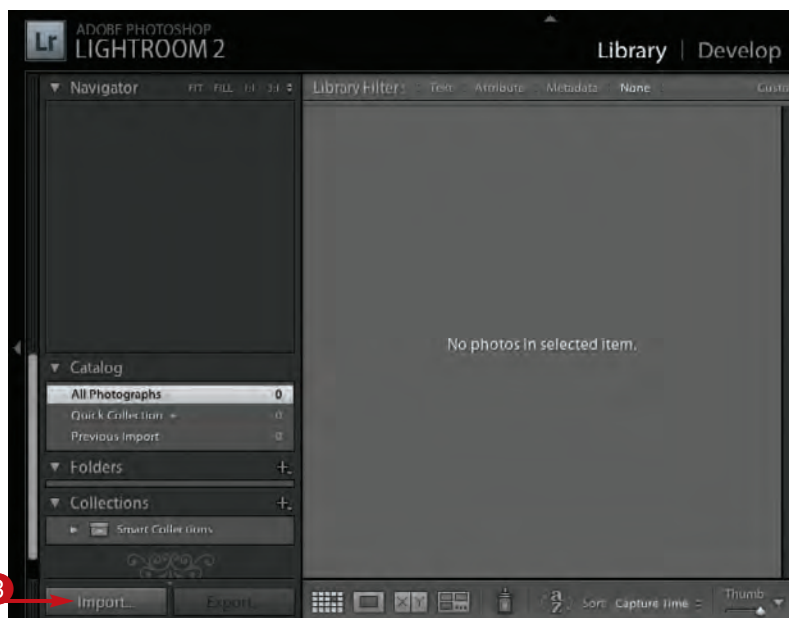
Create a Practice Lightroom Catalog

1 Start with two digital photos on your hard drive, or click and drag two image files from a memory card or optical media.

2 Launch Lightroom.

3 Click **Import**.

Note: You can also click and drag the digital photo files onto the Lightroom icon to launch the application.

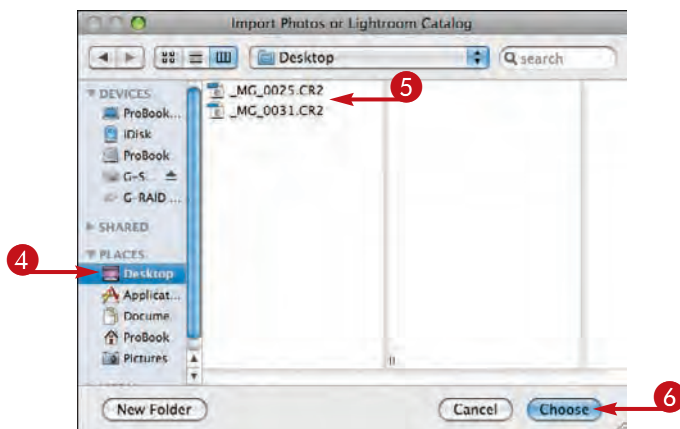


The Import Photos or Lightroom Catalog dialog box appears.

4 Navigate to the practice images on your hard drive.

5 ⌘+click (Ctrl+click) individual images to select them or click a folder of images.

6 Click **Choose**.



The Import Photos dialog box appears.

- 7 Click **Show Preview** (☐ changes to ☑).

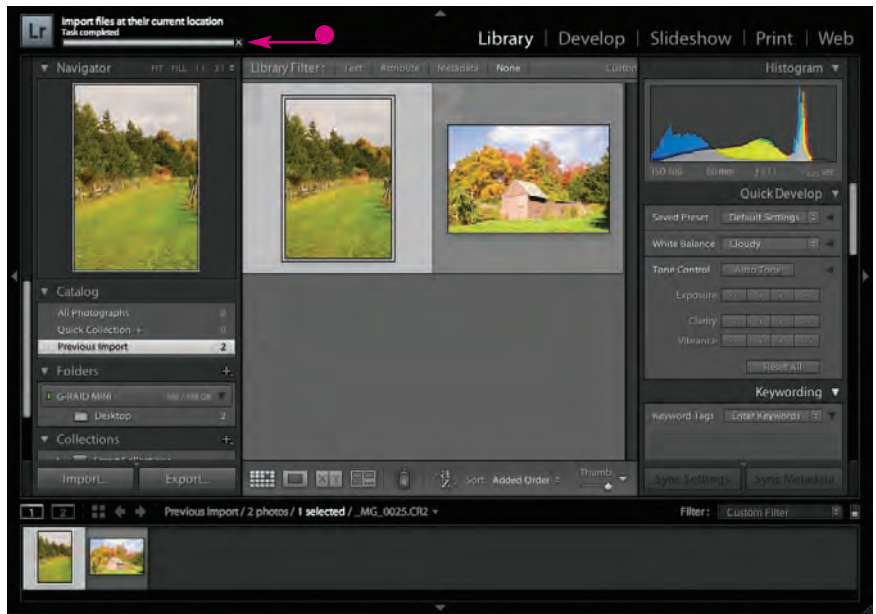
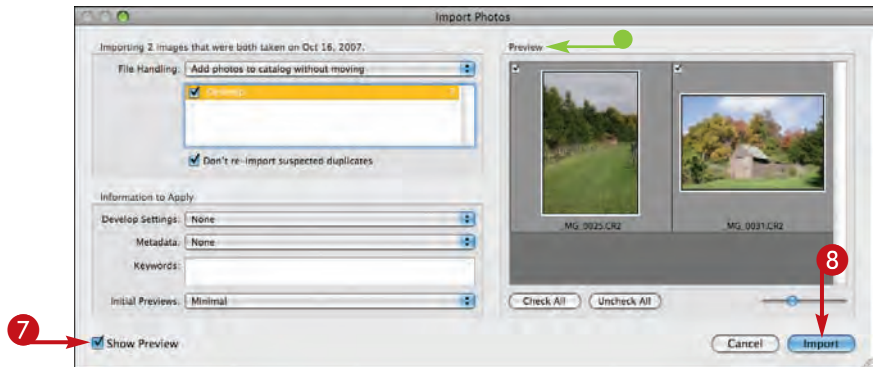
- The dialog box expands to show thumbnails of the selected images.

- 8 Click **Import** to import the photos into Lightroom.

Note: For this practice catalog, you should leave all the other default settings as they are.

The photos are imported into the Lightroom database and catalog.

- Lightroom shows a progress bar on the top left of the screen as it imports the photos.



TIP

Do I have to import all the photos in the folder?

No. You can change the size of the thumbnail previews using the slider to better view the photos and decide if there are some you do not want to import. By default, all the images are selected. You can individually uncheck those you do not want to import or click **Uncheck All** and then reselect only the photos you want to import. This is particularly useful when you import a large group of images and an image is completely blank or is obviously out of focus.



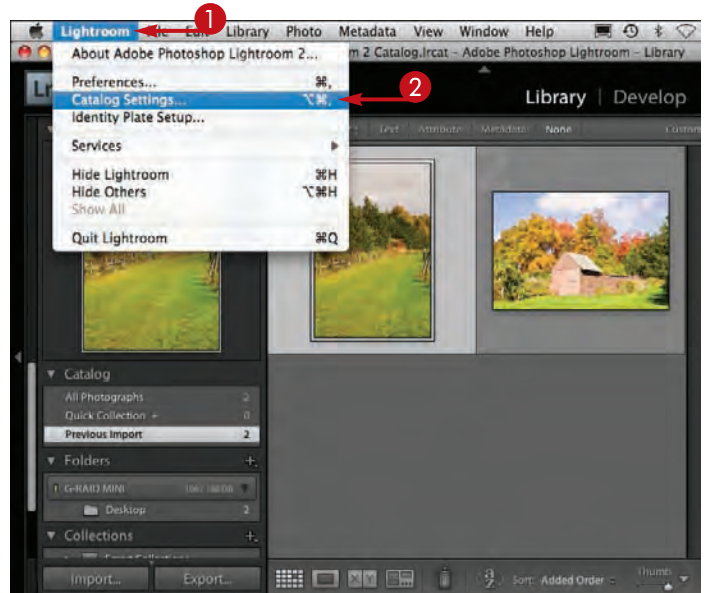
Locate the Practice Lightroom Catalog

In the previous task, two photos were imported into the Lightroom catalog. The photo files themselves were not moved. Instead Lightroom created a record or link referencing the photo files at their original location. This record is stored in the Lightroom catalog, along with a file of previews of the images. Learning where Lightroom places these data files is key to using Lightroom effectively.



Locate the Practice Lightroom Catalog

- 1 Click **Lightroom**.
- 2 Click **Catalog Settings**.



The Catalog Settings dialog box appears.

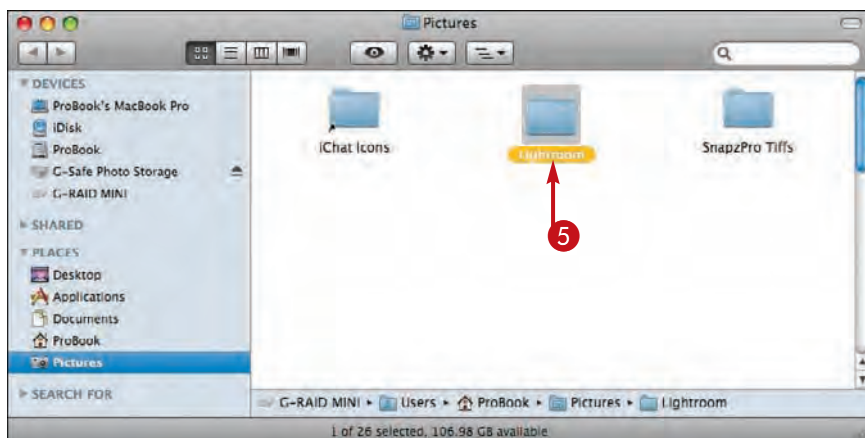
- 3 Click **General** if it is not already selected.
- 4 Click **Show**.



The Pictures folder opens.

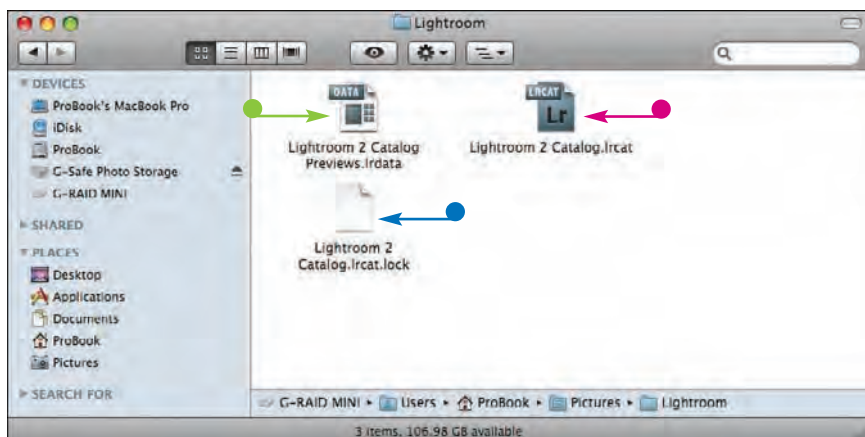
Note: On a PC, the My Pictures folder opens.

- 5 Double-click the Lightroom folder inside the Pictures folder.



The Lightroom folder opens and displays three files.

- Lightroom Catalog Previews.lrdata stores the photo previews. It is created automatically when you import photos.
- Lightroom Catalog.lrcat stores the practice catalog. It is created when you first launch Lightroom.
- Lightroom Catalog.lrcat.lock is a temporary file while the application is open.



TIPS

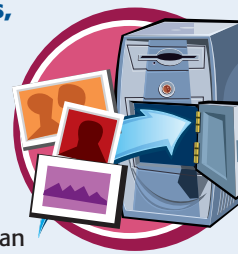
Where does Lightroom save the changes I make to my photos?

All the changes you make to both the organization of your photos and the tonal or other digital developing changes are added as data to the Lightroom catalog file Lightroom 2 Catalog.lrcat.



After I import these two photos, where are the photos stored?

Your original photo files in this exercise are still located on the hard drive where they were. The catalog only contains a reference link to the images, information on how they were taken, and instructions regarding any edits you make. You can choose to copy or move the photos to a different location using the options in the Import dialog box. See Chapter 2 for the different importing options for copying or moving the photo files themselves.



Remove the Photos from the Practice Catalog

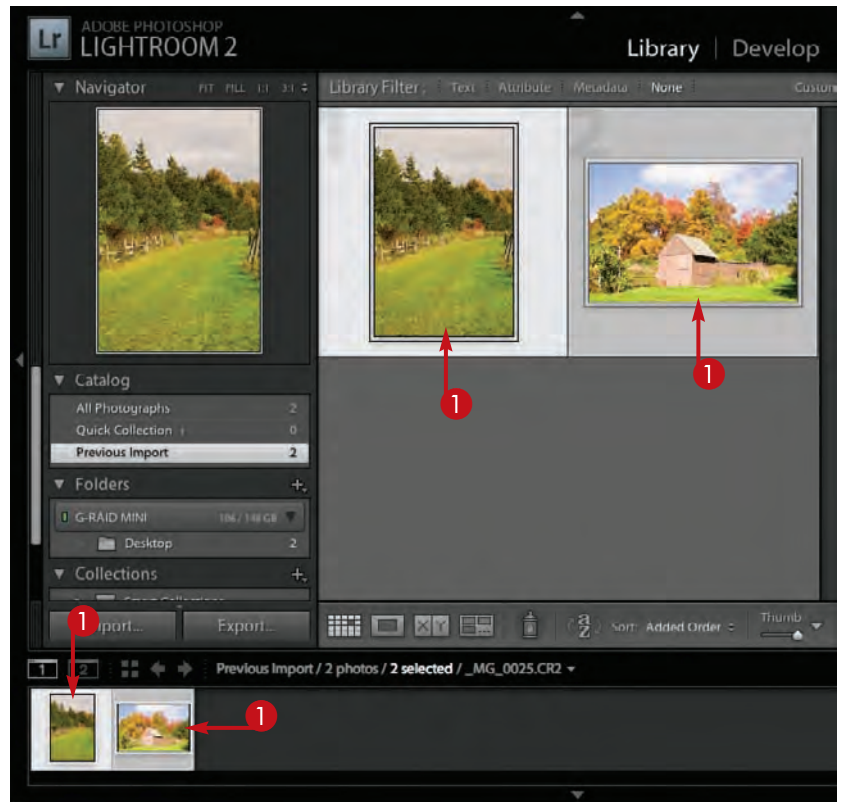
You imported two photos into a catalog to see how and where Lightroom creates a catalog and a reference to the images. You can remove these photos from the Lightroom catalog in several ways. Removing photos from a catalog only removes the data about the photos from the catalog. It does not automatically delete the photo files themselves from your hard drive.



Remove the Photos from the Practice Catalog

REMOVE THE PHOTOS WITH A KEYSTROKE

- 1 In the central viewing area or in the Filmstrip, **Shift**+click the two images to be removed from the catalog.
- 2 Press **Delete** (**Backspace**).



A dialog box appears.

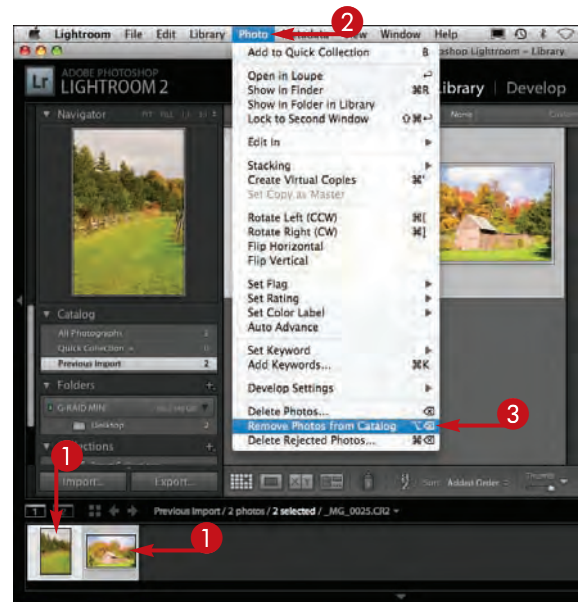
- 3 Click **Remove**.

The photos are removed from the catalog, but the photo files are still in their original location.

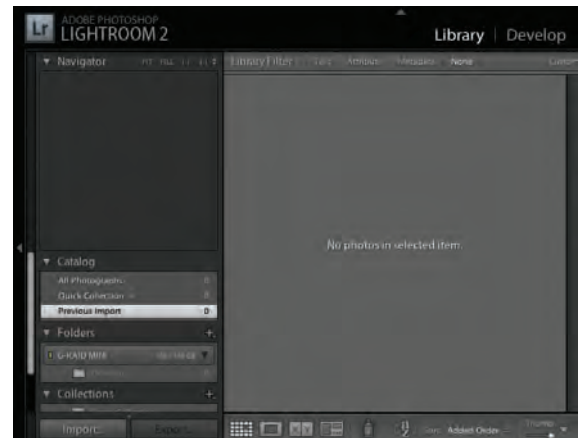


REMOVE THE PHOTOS USING THE MENU

- 1 In the central viewing area or in the Filmstrip, **Shift**+click the two images to be removed from the catalog.
- 2 Click **Photo**.
- 3 Click **Remove Photos from Catalog**.



The photos are removed from the catalog, but the photo files are still in their original location.



TIP

Can I delete the practice catalog instead?

Yes, if you are comfortable deleting files from your computer. With the Lightroom application closed, double-click your hard drive to view its contents. Navigate to the Pictures (My Pictures) folder. Select the Lightroom folder and put it in the trash. The next time you launch Lightroom, a completely new Lightroom catalog will be created. If you delete only the two files Lightroom Catalog.Previews.lrdata and Lightroom Catalog.lrcat, the next time you launch Lightroom, a dialog box appears asking you to find the catalog or create a new one. See Chapter 2 to understand the options for creating a new catalog or a second catalog.



CHAPTER

2

Getting Your Photos into Photoshop Lightroom



With photographers taking more photos digitally than with traditional film cameras, sorting photos and finding a particular image from so many files with the cryptic names that the cameras apply can be difficult. One of the purposes of Lightroom is to streamline the management of large numbers of photos by importing them into a structured filing system and cataloging them in a logical manner. You can import photos in various ways depending on the photo library structure you build. You can also store your photo library on external hard drives, giving you added storage space while keeping your catalog organized.

Understanding Lightroom Catalogs and Image Storage	22
An Overview of Lightroom's Import Process.....	24
Understanding File Formats	26
Import Photos at Their Current Location.....	28
Import Photos from a Memory Card	30
Import Photos and Change Format to DNG	32
Be Consistent with File Names	34
Import Photos and Change Names	36
Rename Photos after Importing	37
Understanding Lightroom's Naming Template Presets	38
Create Your Own Naming Template Preset.....	40
Create a New Catalog.....	44
Import Photos from an Existing Catalog	46
Automate the Import Process	48
Back Up During Import	50
Build a Lightroom Library with External Drives.....	52
Combine a Travel Catalog with Your Main Lightroom Library	56

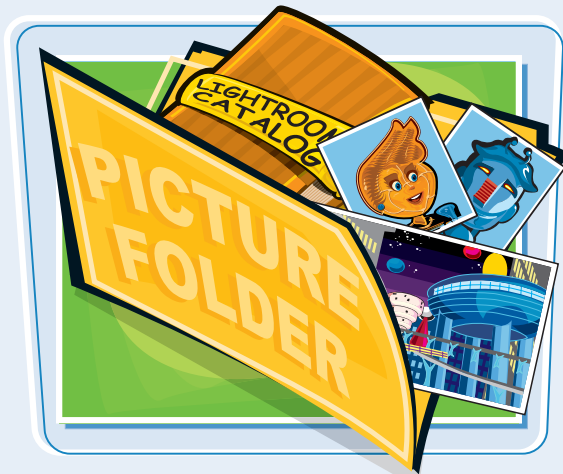
Understanding Lightroom Catalogs and Image Storage

Lightroom differs from other image-editing applications. Instead of applying changes directly to a photo file, Lightroom writes the adjustments you make into a data file and links the data file to the photo file. All this information is kept in a Lightroom *catalog*. The images themselves are stored separately. To be most effective, you need an organizational system for storing Lightroom catalogs and the photo files.



Organization and Customization

The user's Picture folder on the internal hard drive is Lightroom's default location for storing the catalog, the previews, and the photo files. You can choose to store these together or separately on the internal drive, on external drives, or combinations of each depending on the size of your drives and the photo library you plan to build.



The Library Concept

Lightroom maintains a catalog with information about all the photos, similar to a card catalog at a public library. It also creates and keeps a file of previews of each photo, like a book catalog with tiny pictures of the book covers. The photo files themselves, like the books at the public library, can be housed in a different physical location.



The Lightroom Catalog and Other Necessary Files

When you import images into Lightroom, two database files are automatically created. One is called *catalogname.lrcat* and keeps the data about the images including the metadata, rating keywords, collections, and image location. The other is called *catalogname* Previews.lrdata and contains a database of the image previews. These two files should be kept together.



Photo Files

The images themselves can be left in their current location, moved, or copied to another location during the import process. Depending on your storage configuration, you might first copy these files directly from the memory cards to a folder in the final location and then import them into Lightroom, or you might copy them during import directly to the new storage location.



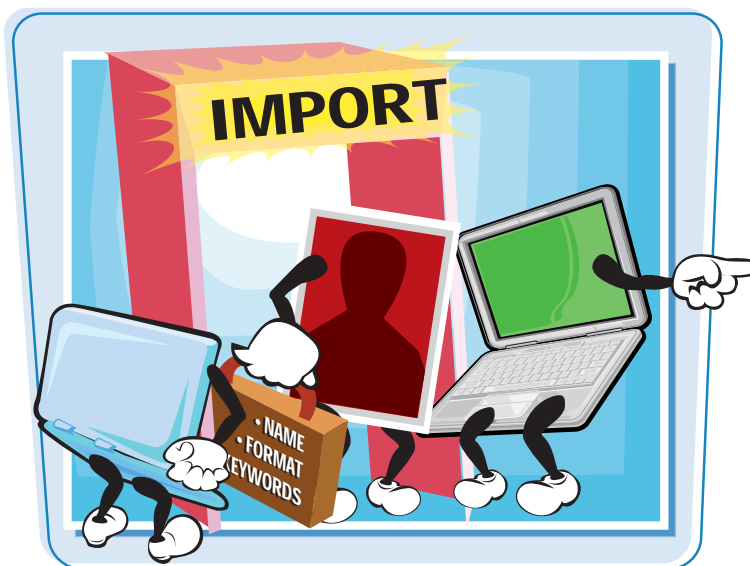
Catalog Backup File

Lightroom can automatically create a duplicate or *backup catalog* in a separate location. In the Catalog Settings Preferences under the General tab, you can set Lightroom to schedule a backup of the catalog, preferably every time Lightroom starts. When next launched, Lightroom creates a duplicate of the *catalogname.lrcat* file and places it in a new dated folder in the location you specify.



An Overview of Lightroom's Import Process

When Lightroom imports photos, it records all the data about the photos, including a link to the storage location, in a catalog. You decide where the actual photo files will be stored using the options in the Import dialog box. You can also select what file format to save the photos in, how to name them, and even add information to make searching easier.



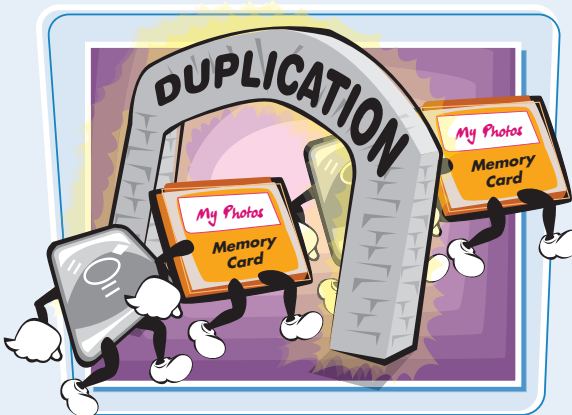
Location of the Source Images

Lightroom can import photo files directly from memory cards or removable media such as CDs or DVDs, as well as from other separate hard drives and digital photo viewers where you copied your photos when traveling.



The Import Location

When importing, you can leave the photo files at their current location if they are already on the intended storage drive or make a complete duplicate of the files by selecting one of the copy options in the import dialog box. You can even choose to move the files from one location to a new one during the import process.



The Import Process

Understanding the import process is the key to using Lightroom. With other image editing applications, you *open* an image to view and edit it. However, because Lightroom functions both as a database and an image editor, the images must be *imported* rather than just opened.

Rename or Move Imported Photos

The photo files for your imported images can be located in different locations, not just on one hard drive. Because Lightroom catalogs the files and includes a reference to their location and name, you should use Lightroom and not the Finder (Explorer in Windows) to rename or move any photo files after they have been imported.

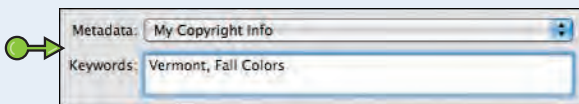
● Become a Photo Library Architect

A first step is to design your photo library, planning where the images will be stored and how you will name the files and folders. When you do so, you can create a more efficient photo filing system and take full advantage of digital search capabilities. The design depends on your available storage space and back-up plan, as well as your own sorting requirements.



● Set Up Folders and File Names in Advance

You can set up and name folders at the storage location in advance to make the import process more logical. In Lightroom's Library module, you can create a naming template or system for naming your photos. You can then choose to apply the new file names when Lightroom imports the photos or later when you edit them.



● Add Keywords and Metadata During Import

The options in the Import dialog box enable you to add settings, keywords, and other pertinent information to a whole set of photos during the import process. You can add more detailed metadata later when viewing your photos in the Library module. See Chapter 3 for more about the Library module.

Understanding File Formats

A file format, designated by a 3- or 4-character code after the file name, tells the computer what type of information is encoded in the file. Photographic images have various file formats depending on the source. Lightroom can process most photographic file formats including most camera manufacturers' proprietary RAW files, DNG, JPEG, TIFF, and PSD.



File Formats

The list that follows defines various file formats.

RAW

A RAW file is the most direct representation of what the camera sensor captures. The data in a RAW file, such as white balance, sharpening, and color, is not processed or compressed in the camera. RAW files are truly your digital negatives.

JPEG

A JPEG is the most commonly used photographic file format. To produce a JPEG file, the camera processes and compresses the data captured by the image sensor. Some image data is lost during compression, which can cause unwanted *artifacts*, or white pixels, when the JPEG is enlarged.

TIFF

A TIFF or TIF file is used for various applications from image editing to document imaging. A TIFF can be a large file and can include multiple layers.

PSD

A PSD is the standard file format produced by Photoshop and Photoshop Elements. A PSD is also a large, uncompressed file and can include multiple layers.

XMP

XMP is a metadata file that you can embed or attach as a sidecar file into a manufacturer's RAW photo file. An XMP sidecar file travels with the photo file and includes information such as exposure, image size, copyright, and any edits you make to the photo in Lightroom.

DNG

DNG is a RAW format developed by Adobe as an open standard for camera files and is available to all camera manufacturers. Lightroom includes a DNG converter to change a manufacturer's proprietary RAW file into a DNG. A DNG has lossless compression, meaning no data is deleted during the processing. Any edits in Lightroom are written into the DNG file.

Differences between JPEG, RAW, and DNG

Most digital cameras can create JPEGs and sometimes TIFFs. Advanced cameras can also write a manufacturer's proprietary camera RAW format, such as NEF or CR2. Some cameras can produce DNGs, a more universal RAW file format. The manufacturer's RAW files require specific software to convert the file in the computer; however, RAW files give the photographer more options for editing the photos.

The Advantages of RAW

Shooting JPEGs is faster than shooting RAW files. However, when shooting JPEGs the camera processor applies *lossy* compression, a type of compression that discards, or loses, some of the pixel data as the camera records and processes the photo. By contrast, a RAW file contains the complete, unprocessed pixel data as captured by a camera sensor. The RAW file format allows the photographer to manipulate the actual data to improve colors, tone, and more during image editing.

The Advantages of DNG

The digital photo industry is quickly evolving. Each camera manufacturer has its proprietary RAW format, and all may not be supported later on. Although you can save photos in the RAW file format, converting these to DNGs in Lightroom and archiving the DNG photo files instead avoids obsolescence or compatibility problems in the future and offers additional advantages. DNGs use lossless compression, thereby reducing file size 10 to 40 percent compared to RAW files. With DNG files, metadata can be written directly into the file structure, eliminating the need for XMP sidecar files as with RAW files. Finally, the previews stored with DNGs are updated to represent the edit settings you have applied to the photo.

Import Photos at Their Current Location

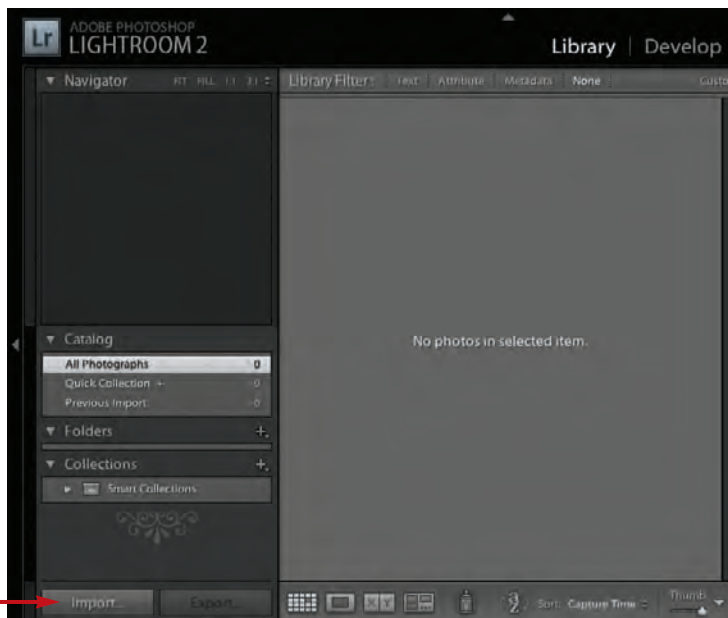
You probably have folders of photos on your computer or another hard drive. If you already have an organized photo folder system in place, you can import the existing folders or individual photos into Lightroom and leave the files in their current location, making the import very quick. Lightroom creates a link to the files so it can manage the images in the catalog.



Import Photos at Their Current Location

- 1 Launch Lightroom.
- 2 Click **Import** to start the import process.

*Note: Optionally, click **File** and then click **Import Photos from Disk**.*

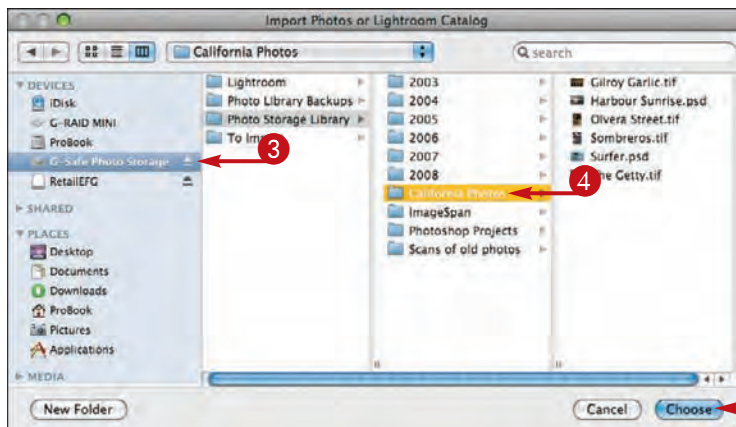


The Import Photos or Lightroom Catalog dialog box appears.

- 3 Navigate to the folder or individual photos.
- 4 Click the folder to select it.

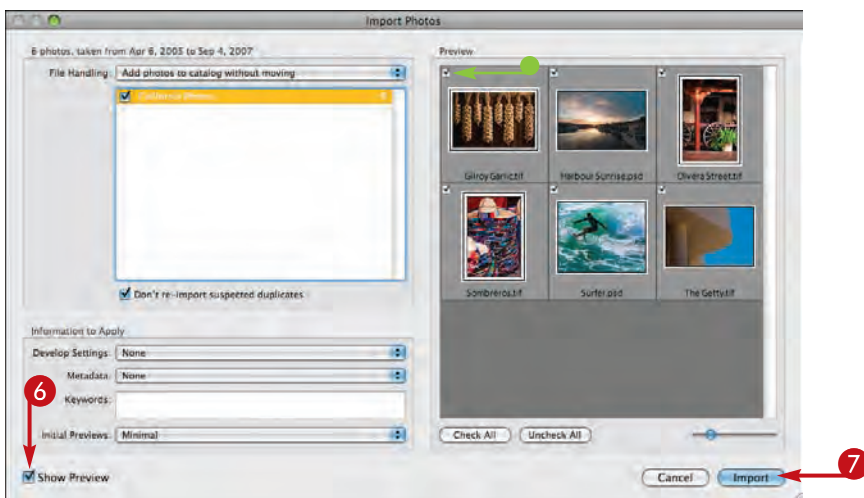
*Note: Optionally, **⌘**+click (**Ctrl**+click) the individual photo files to select them.*

- 5 Click **Choose**.



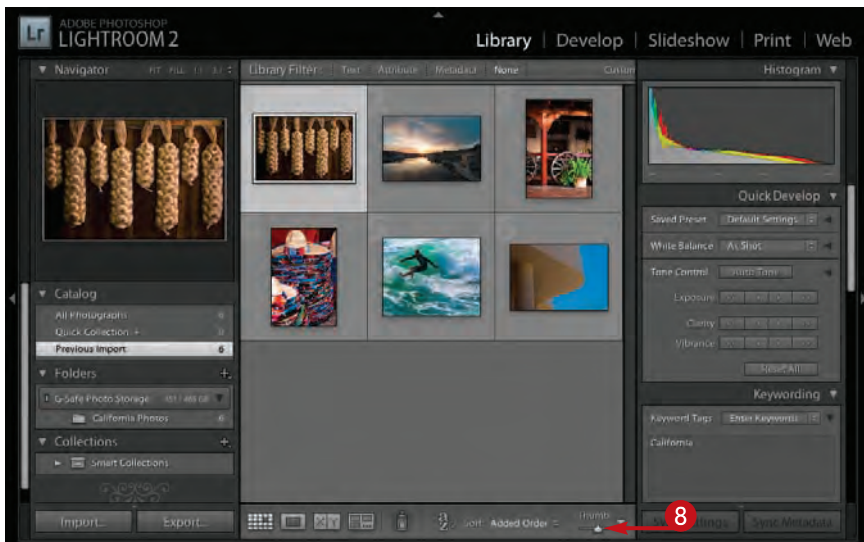
The Import Photos dialog box appears.

- 6 Click **Show Preview** to view the previews of the photos (☐ changes to ☒).
- Click to deselect any photos you do not want to import (☒ changes to ☐.
- 7 Click **Import**.



The photos are imported to the catalog, leaving the files at their original location.

- 8 Click the **Thumbnails** slider (🖼️) and drag to the right to see larger thumbnails.



TIPS

Is there a disadvantage to showing the previews before importing my photos?

Showing previews takes time. If you import hundreds of photos at once, you can uncheck **Show Preview** in the Import photos dialog box. Once you click the **Show Preview** check box, it remains checked even after you close the Lightroom application until you uncheck it.



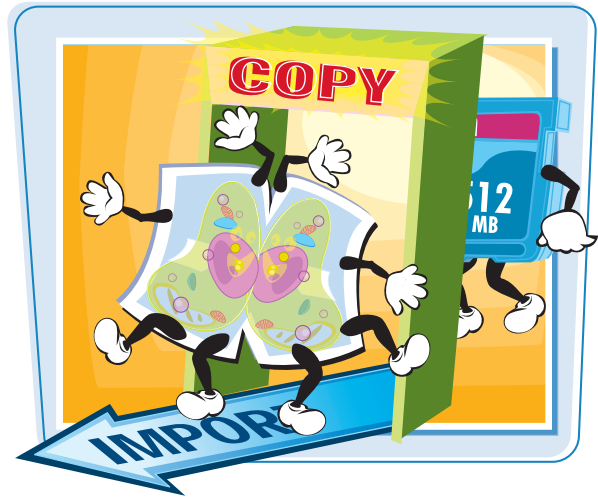
Where does Lightroom save the catalog?

The default location for the Lightroom catalog on a Mac is in the Pictures folder of the user's home folder, and in the My Pictures folder inside the My Computer folder on a PC.



Import Photos from a Memory Card

When you transfer photos from a memory card to your computer, you should copy the photos to a new location and import them into the Lightroom catalog. You have many options in the Lightroom Import dialog box when you move or copy photos from one location to another.

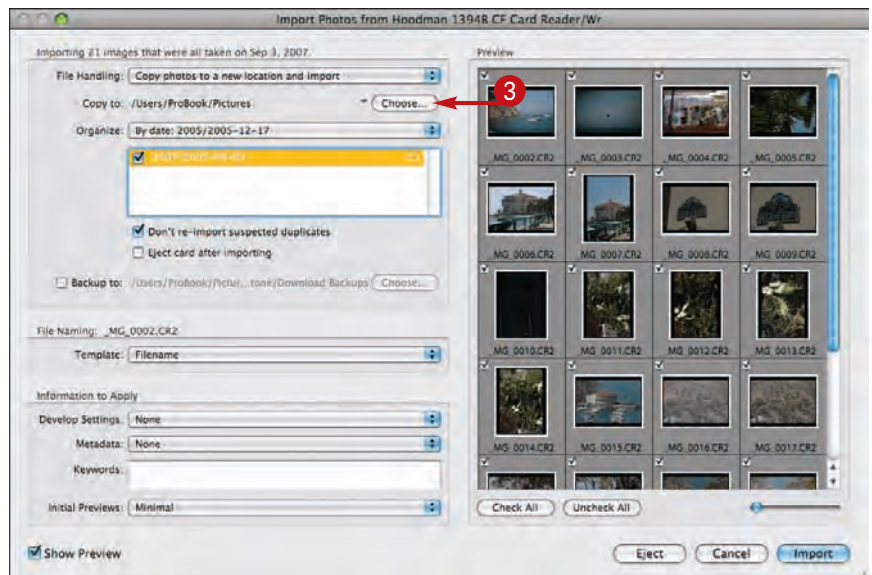


Import Photos from a Memory Card

- 1 Launch Lightroom.
- 2 Insert a memory card with photos into a card reader connected to your computer.

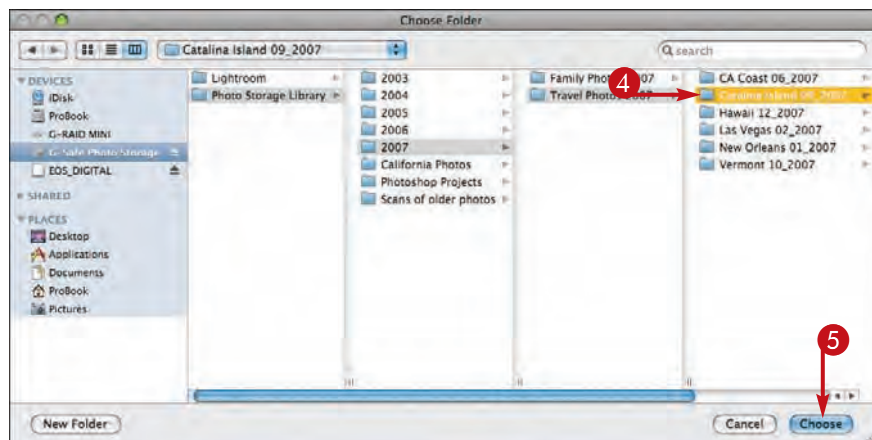
The Import Photos from *Your Memory Card Reader* dialog box appears.

- 3 Click **Choose** to select the location to copy the files.



The Choose Folder dialog box appears with the Pictures (My Pictures) folder selected by default.

- 4 Navigate to your photo storage location on your selected hard drive.
- 5 Click **Choose**.



Lightroom returns to the Import Photos dialog box.

6 Click the **Organize** button.

7 Click **Into one folder**.

Note: Optionally, you can import the photos by their existing folders or into folders designated by the date the photos were taken.

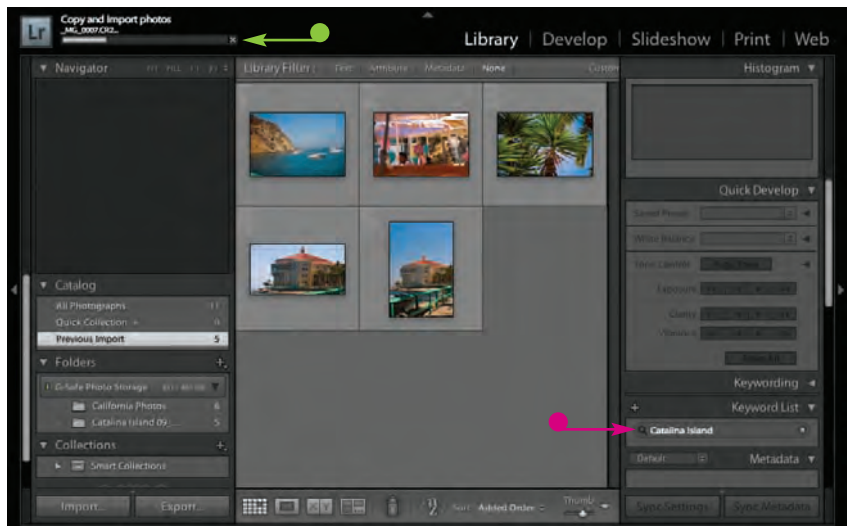
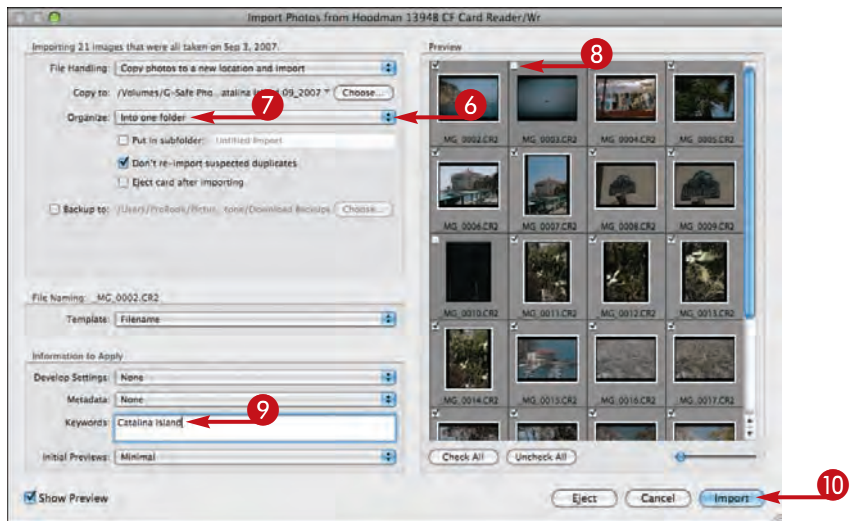
8 Click to uncheck any photos in the Preview panel you do not want to import at this time (checked changes to unchecked).

9 Type keywords that relate to the whole series of photos.

10 Click **Import**.

Lightroom copies the photos to the designated folder in the new location and enters the data into the catalog.

- A descriptive progress bar appears in the top left corner.
- Any keywords appear in the Keyword List on the right panel.



TIPS

What if I do not want Lightroom to automatically open the Import dialog box?

Lightroom's default setting is to open the Import dialog box when a memory card is inserted. You can change this setting and others as described in the preferences section of Chapter 4.



Can I just connect the camera to the computer using a USB cable?

Although you can connect the camera directly to the computer to download files from the memory card, downloading is faster, more secure, and does not use the camera's battery when you use an external card reader. See the last chapter to learn about card readers.



Import Photos and Change Format to DNG


RAW files offer more creative control for editing; however, they must be converted in the computer either by the camera manufacturer's software or by digital imaging software such as Lightroom or Photoshop. With the digital imaging industry constantly changing, some camera-specific RAW files may prove to be a challenge to open in the future, depending on both software updates and changes in computer operating systems. You can convert your RAW files to Adobe's DNG open-standard RAW files, for archiving and to ensure you will always be able to open them.

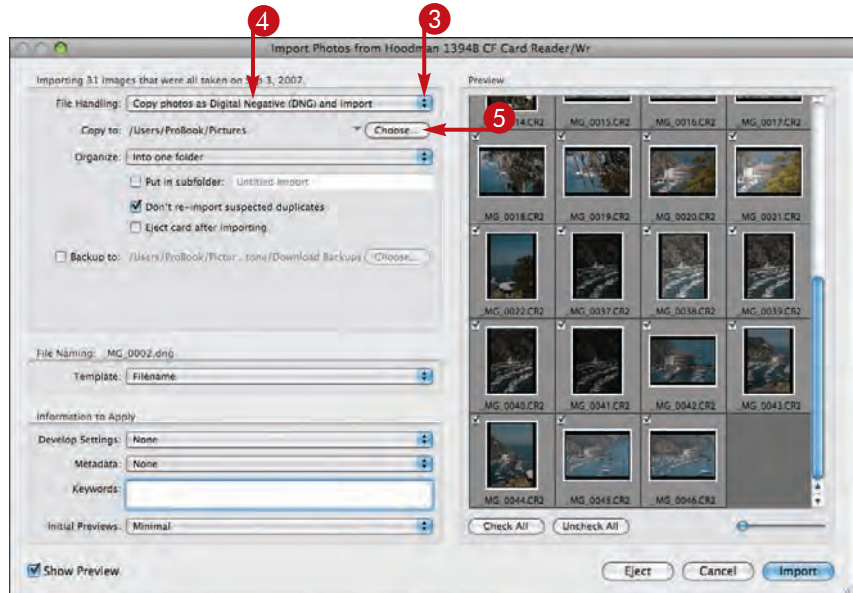


Import Photos and Change Format to DNG

- 1 Launch Lightroom.
- 2 Insert a memory card with photos into a card reader connected to your computer.

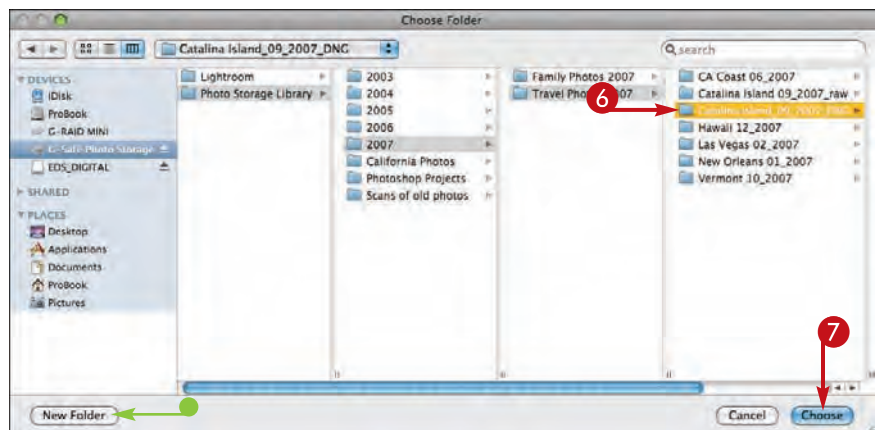
The Import Photos from *Your Memory Card Reader* dialog box appears.



- 3 Click the **File Handling** .
- 4 Click **Copy photos as Digital Negative (DNG) and import**.
- 5 Click **Choose** to select the location to copy the files.



The Choose Folder dialog box appears.

- 6 Navigate to a folder to import the DNG files.
- Click **New Folder** to create and name a folder in which to store the DNGs.
- 7 Click **Choose**.

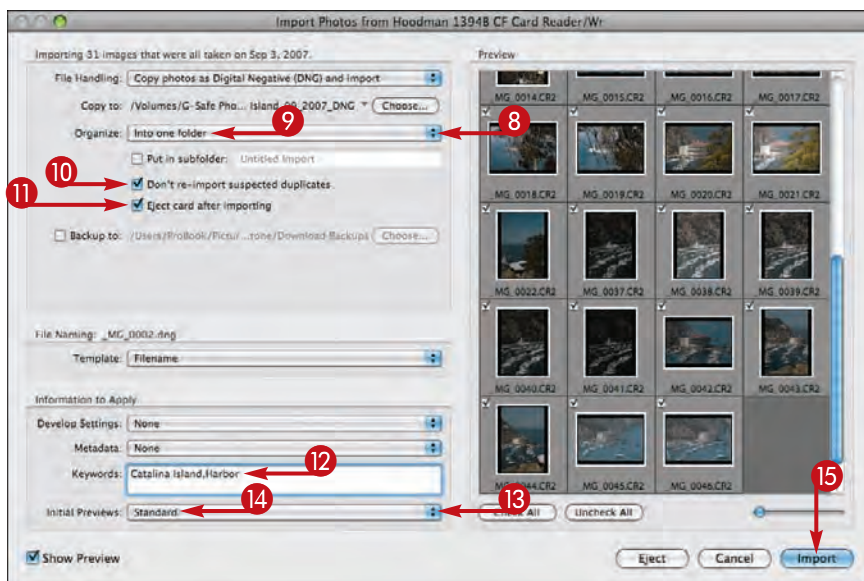


- 8 In the Import Photos dialog box, click the **Organize** .
- 9 Click **Into one folder**.
- 10 Click **Don't re-import suspected duplicates** (☐ changes to ☒.
- 11 Click **Eject card after importing** (☐ changes to ☒.
- 12 Type some keywords applicable to all the photos to be imported.
- 13 Click the **Initial Previews** .
- 14 Click **Standard**.

Note: Importing with **Standard** rather than **Minimal** previews selected takes longer. However, once imported, Lightroom will have previews that match the minimum requirement for working in the Library. You can import with **Minimal** previews and then let Lightroom render the larger previews all at once before you work with your photos.

- 15 Click **Import**.

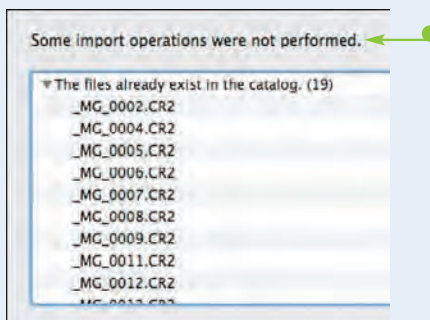
The photos are imported into the Lightroom database and cataloged and the photo files are copied as DNGs to the new folder.



TIPS

Why did another dialog box appear as I was importing?

Lightroom did not re-import any photos it had already imported (●) into the catalog because you checked the box next to **Don't re-import suspected duplicates** in Step 10. Click **OK** to continue or click **Show in Library** to verify their existing location.



Why does storing a DNG instead of a camera manufacturer's RAW file save space?

Not only does the DNG start out slightly smaller in file size than a camera RAW file because it uses lossless compression, it also writes the data of the changes you make when editing the file, such as white balance or color settings, directly into the file instead of having to create a sidecar XMP file.



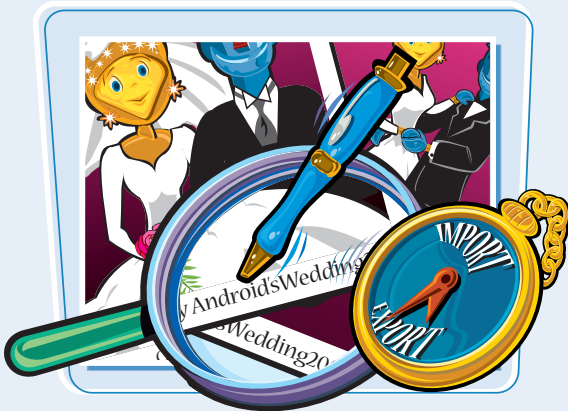
Be Consistent with File Names

Each digital camera manufacturer applies a name and sequential number to your photos as you shoot. Finding a specific photo named MG0022.CR2 or DSCN0340.JPG can be difficult. You can change the file names to something that is relevant to the photo or date taken using Lightroom. It is essential that you be consistent with your photo file names to take advantage of Lightroom's cataloging benefits, and to find your photos quickly in the future.



Rename at Different Times

You can rename a group of images all at once as you import them, or rename the files when they are in the Lightroom catalog using the Library module. You can also rename the files when you export them. See Chapter 3 for more about the Library module.



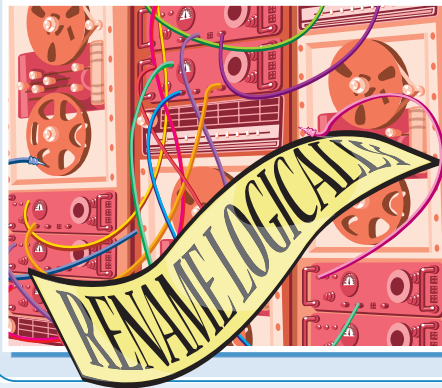
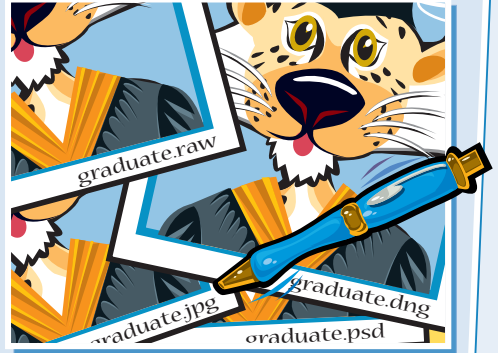
Rename or Renumber

You can add specific information for a location or add a date designation, leaving the existing camera-applied file number. You can also rename the images completely, giving them a distinct name and sequence number.



Rename Consistently

Whether you rename or not, you should keep all stored versions of a photo file, from RAW to DNG or JPEG, with the same name for a consistent and organized catalog.



Rename Logically

You can create a name that includes the location, event, or included subjects and then add a sequence number for a particular set of images. You should not have a file name longer than 31 characters, so that other applications, such as Bridge, can access the file.

Special Renaming Situations

Although renaming files is not absolutely required for a Lightroom catalog, you must rename the files in two instances to avoid data collisions if different photo files have identical file names. First, if you changed the numbering in the camera from continuous to auto reset, each time you insert an empty memory card, the camera assigns file names starting with 0001. Second, if you shoot with two cameras of the same brand, separate images from each camera will have duplicated names and numbers.



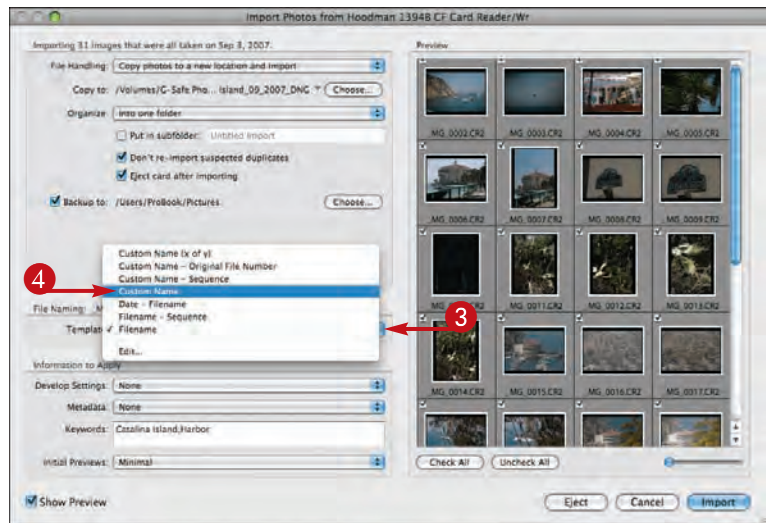
Import Photos and Change Names

You can change the camera-applied name of photo files as you import the data into the Lightroom catalog if you select copy, move, or copy as DNG in the File Handling section of the import dialog box. You cannot change the file names when you import if you choose to import photos at their current location.



Import Photos and Change Names

- 1 Launch Lightroom.
 - 2 Insert a memory card with photos into a card reader connected to your computer.
- The Import Photos from *Your Memory Card Reader* dialog box appears.
- 3 Click the **Template** ▾ in the File Naming section.
 - 4 Click **Custom Name**.

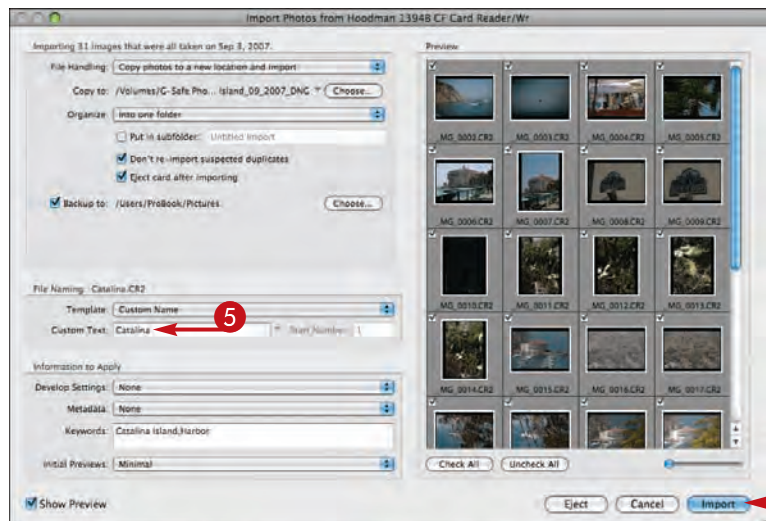


A Custom Text box opens.

- 5 Type a name for all the files, such as Catalina.
- 6 Click **Import**.

The files are imported and renamed as Catalina.CR2, Catalina-1.CR2, Catalina-3.CR2.

The files are automatically numbered sequentially as imported.



Rename Photos after Importing

chapter 2

The Library module enables you to rename one photo file or a group of files after you import them into the Lightroom catalog. Renaming after importing does not copy or move the files to a new location.

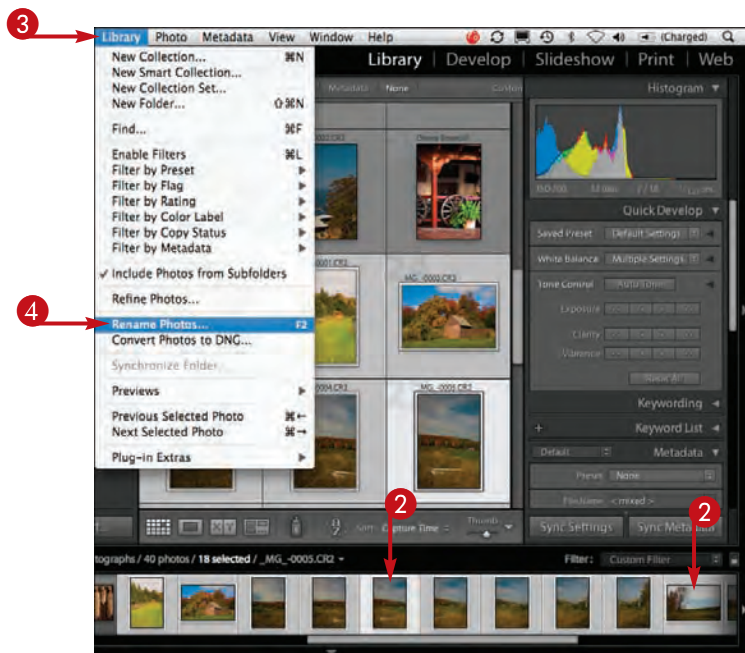


Rename Photos after Importing

- 1 Open Lightroom and click the Library module.
- 2 **Shift**+click a series of photo thumbnails to select them.

Note: Optionally, **⌘**+click (**Ctrl**+click) individual photo files to select them.

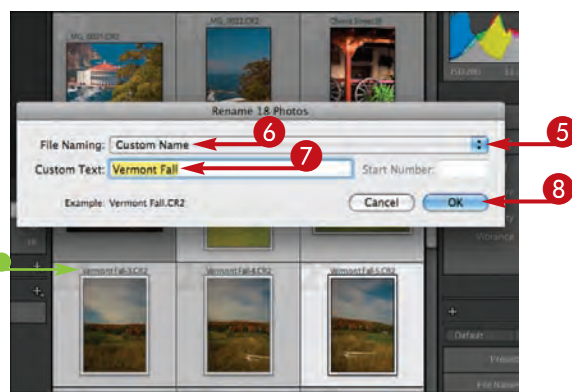
- 3 Click **Library**.
- 4 Click **Rename Photos**.



The Rename (*number of photos*) Photos dialog box appears.

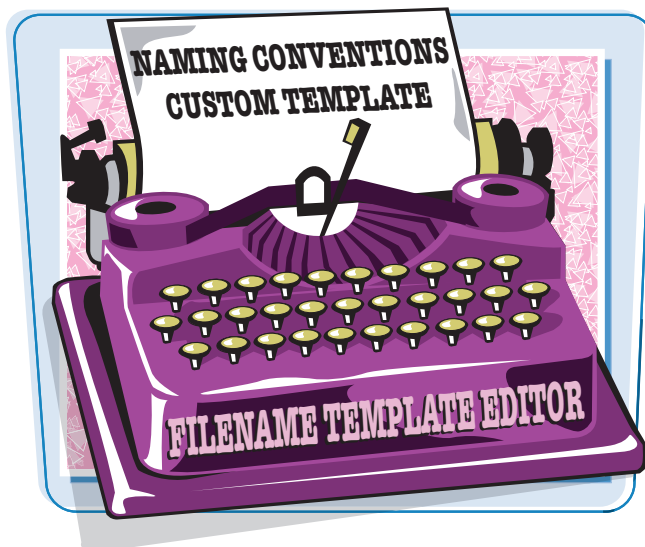
- 5 Click the **File Naming** button.
- 6 Click **Custom Name**.
- 7 Type the custom name in the text box.
- 8 Click **OK**.

- The files are renamed as in the previous task.



Understanding Lightroom's Naming Template Presets

When you rename photos, you can also select Edit from the File Naming drop-down menu in the Rename Photos dialog box. You can edit Lightroom's naming template presets to create your own custom template. Using the Filename Template Editor, you build your naming template preset using blue placeholders called *tokens* for the information to be inserted in the new file name. You can save your custom filename template as a preset and use it for consistency with all import, renaming, and export operations.



Lightroom Filename Template Presets

Custom Name. Names the photos using your text.

Custom Name (x of y). Applies your text, followed by sequential numbers in relation to the total number of photos being imported at that one time, as in 1 of 10. The next time you use that naming template it restarts as in 1 of 7, 2 of 7.

Custom Name – Original File Number. Applies your text followed by the photos' original number.

Custom Name – Sequence. Applies your text followed by sequential numbers starting with the number you specify at each import session.

Date – Filename. Applies the creation date, followed by the photos' current file names.

Filename. Applies the current file names.

Filename – Sequence. Applies the photos' current file names, followed by sequential numbers starting with the number you specify.

Lightroom Filename Tokens to Insert for Custom Template Presets

Image Name Tokens

Filename. Includes the existing filename.

Filename number suffix. Includes the existing number suffix, such as 0019.CR2.

Folder name. Adds the name of the enclosing folder to the filename.

Original filename. Adds the original filename from the camera.

Original number suffix. Includes the original number suffix from the camera.

Copy name. Only numbers the photos starting with no number, then 1, and so on.

Sequence and Date Tokens

Sequence # (1) – Sequence # (00001). Adds a sequential number starting with the number you specify at the time of import or renaming.

Image # (1) – Image # (00001). Adds a sequence number for the files imported or renamed at one time and is cumulative across imports, as in 2-1, referring to the second photo of the first import session, or 5-10 as the fifth photo of the tenth import or renaming session.

Total # (1) – Total # (00001). Adds the total number of files imported or renamed at one time, as in 5-1, referring to the first photo of 5 total imported, and 10-3 being the third of 10 on the next import.

Date. Adds the day, date, or time the photo was taken using the EXIF information embedded in the photo file. You can use Lightroom's date tokens or combine several individual date tokens to create a custom date-naming template.

Metadata Tokens

Metadata tokens. Available only in the Filename Template Editor for renaming or exporting photos, metadata tokens add camera model or other detailed information.

Custom Tokens

Custom Text tokens let you write out specific information such as a location or project or person's name.

Additional Import Token

When you access the Filename Template Editor from the Import Photos dialog box, the token options are slightly different and include the Import # token: **Import # (1) – Import # (00001).** This token adds the number of times you use the Import feature and is cumulative across imports: 5-2 is the fifth import session, second photo; 5-3 is the fifth import session, third photo.

Create Your Own Naming Template Preset

You can create your own naming template preset and use it for all your imports. Adding a Custom Text token, you can change the name of a set of photo files to correspond with the location of the shots, the name of a person, or any project name. Adding Date tokens automatically adds the date or time each shot was taken.



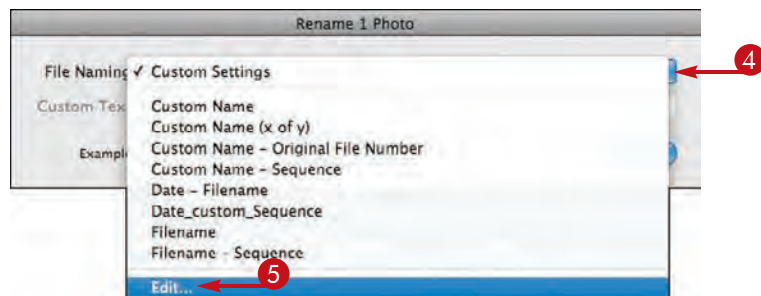
Create Your Own Naming Template Preset

- 1 Click a photo in the Library module to select it.
- 2 Click **Library**.
- 3 Click **Rename Photo**.



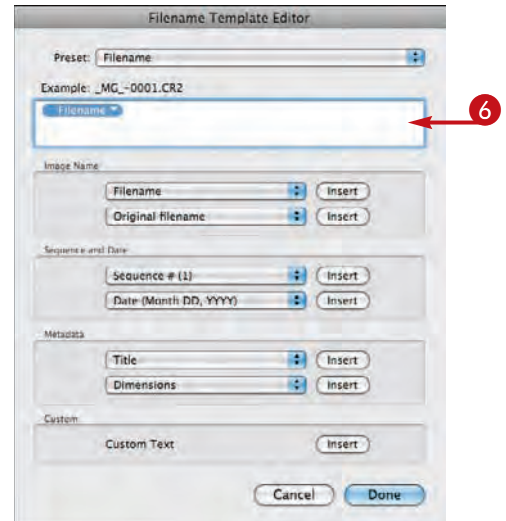
The Rename Photo dialog box appears.

- 4 Click the **File Naming** button.
- 5 Click **Edit**.



The Filename Template Editor appears.

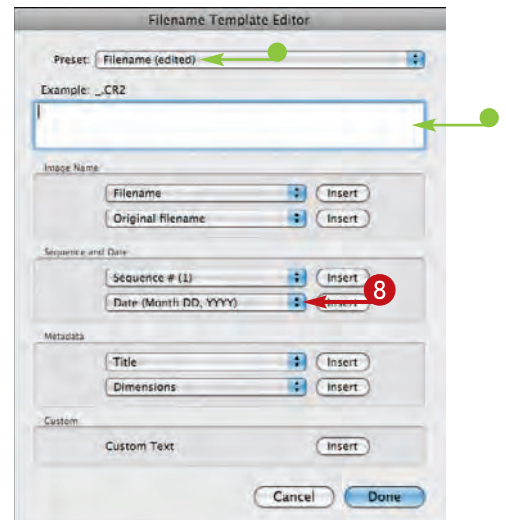
- 6 Click in the text box, which shows the Filename token.
- 7 Press **Delete** (**Backspace**).



- The Filename token is removed and the Preset is renamed Filename (edited).

Note: The following steps show one option for creating a naming template preset. You can customize your own template by selecting different options.

- 8 In this example, click the **Date** token.



TIPS

Can I add as many tokens as I want for my filename template?

No. A complete file name should be no longer than 31 characters, including the file type extension. You can count the characters in the example file name that appears above the text box with the tokens in it.



Do I have to create separate templates for importing and exporting?

No. Once you create a File Naming Template and save it as a preset, it appears listed in the File Naming drop-down menu in the Import, Rename, and Export dialog boxes.



Create Your Own Naming Template Preset (continued)

You can create a completely new template preset for file naming, or you can start with any of Lightroom's existing template presets and add tokens where you want different options to appear. You can separate the tokens with underscores or hyphens, or run the tokens together in one string.

The example in this task uses one selected photo to access the Filename Template Editor but does not actually rename that photo.



Create Your Own Naming Template Preset (continued)

- 9 Select **Date (YYYY)** from the list that appears.

- A Date token is automatically placed in the text box.

Note: If the Date token is not placed in the text box automatically, click **Insert** by the Date option.

- 10 Click in the text box to deselect the Date token.

- 11 Press **Shift**+**_** to place an underscore after the Date token.

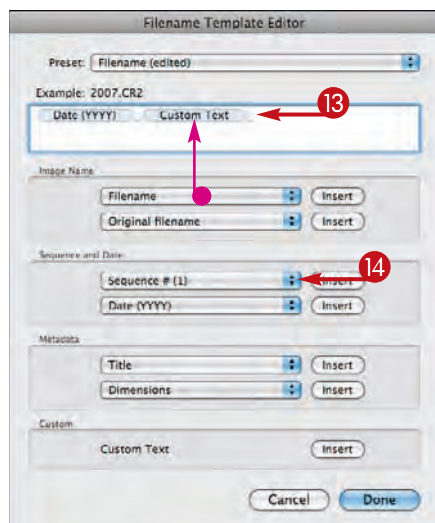
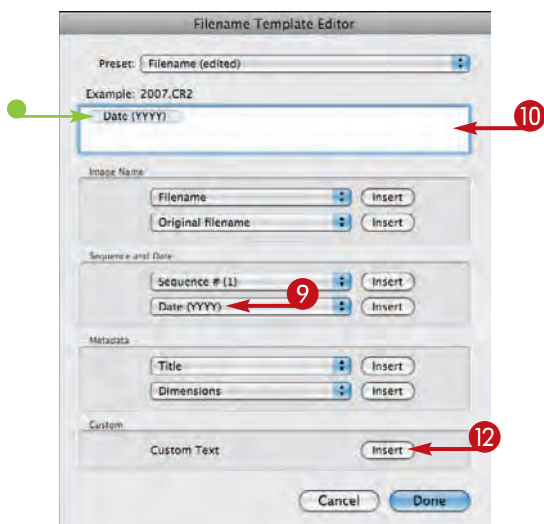
- 12 Click **Insert** in the Custom Text field.

- A Custom Text token is placed after the underscore in the text box.

Note: The token is a place-holder. When you select your filename template preset for renaming, importing or exporting, a text box will appear for typing the custom text.

- 13 Repeat Steps 10 and 11 deselecting the Custom Text token and adding an underscore.

- 14 Click the **Sequence** .



15 Select **Sequence # (0001)**.

- A Sequence # (0001) is inserted into the text box.

16 Click the **Preset** button.17 Select **Save Current Settings as New Preset**.

18 In the New Preset dialog box, type a name for the new file-naming template preset.

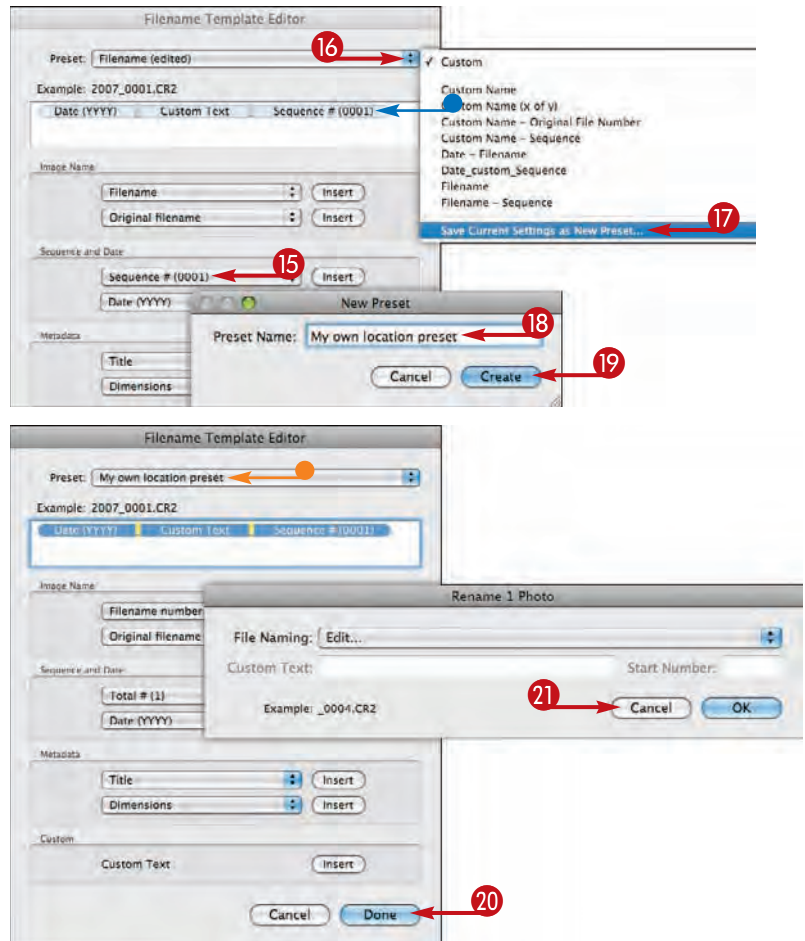
19 Click **Create**.

- The new Preset with your custom name appears in the Filename Template Editor.

20 Click **Done**.21 Click **Cancel** in the Rename 1 Photo dialog box.

Note: Optionally, you can click **OK** in the *Rename 1 Photo* dialog box to rename the one selected photo. Your new Filename Template Preset has been saved for future use.

From now on, when you import, rename, or export images, your custom template preset appears in the File Naming drop-down menu. After selecting your custom template preset, you can type any custom text, such as a location, in the Custom Text field that appears in the Rename, Import, or Export dialog boxes.



TIP

I use two cameras but I want to keep the original file names. Can I still avoid data collisions when I import?

Yes. You can create a custom filename template to distinguish photos taken with the two camera bodies and still preserve the original file names. Create a file name template with a Metadata token for Serial Number and a token for Filename. Lightroom adds each camera's serial number to the corresponding file name and adds the original file number. You can also use a Make token if you have two different brands of camera bodies, or a Model token if the models are different.



Create a New Catalog

The first time you launch Lightroom, it automatically creates a catalog in the user's Pictures (My Pictures) folder, the default location. You can create a new catalog in two different ways depending on whether Lightroom is open or closed.



Create a New Catalog

CREATE A NEW CATALOG WITH LIGHTROOM CLOSED

- 1 Press and hold the **Option** (**Alt**) key as you launch the Lightroom application.

The Adobe Photoshop Lightroom – Select Catalog dialog box appears.

- 2 Click **Create New Catalog**.

The Create Folder with New Catalog dialog box appears.

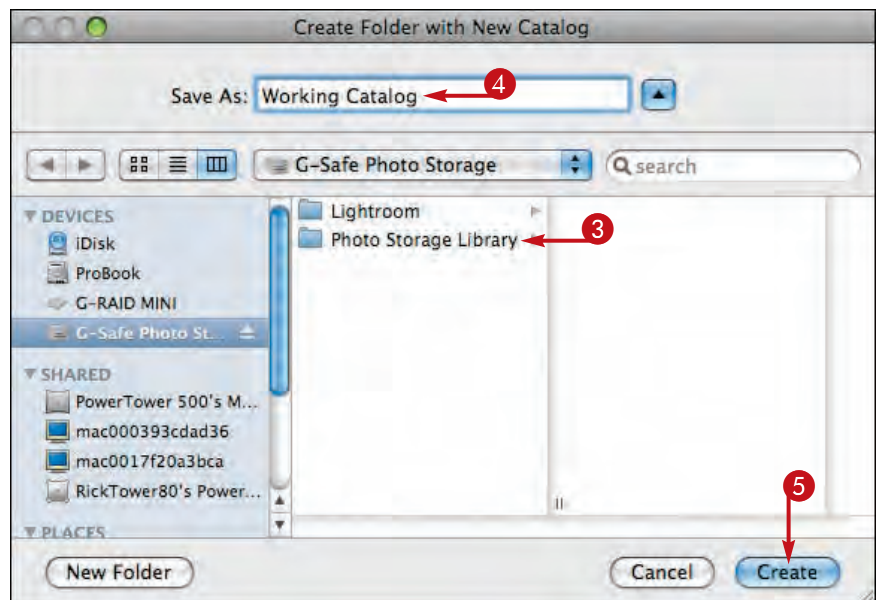
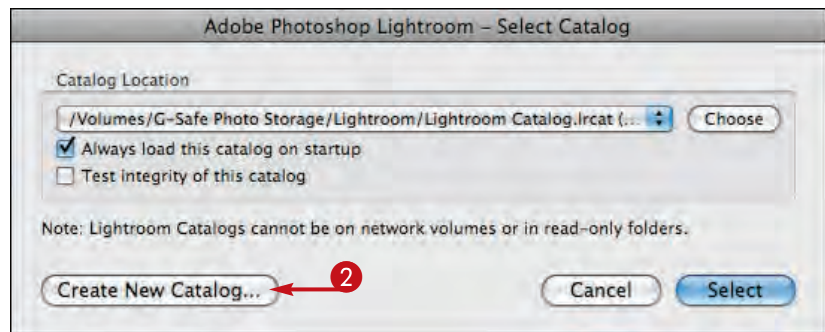
- 3 Navigate to and click the name of the storage location for the new catalog.

*Note: Optionally, click **New Folder** and name the folder.*

- 4 Type a name for the new catalog in the Save As text box.

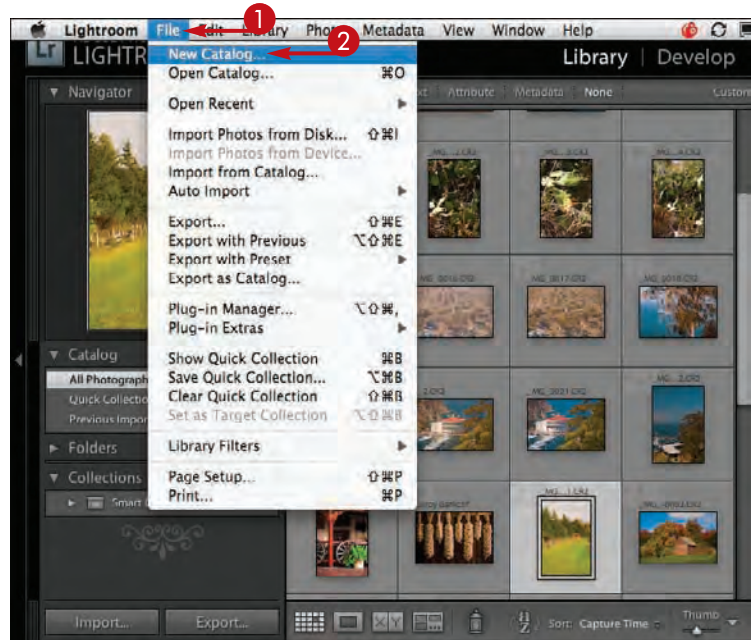
- 5 Click **Create**.

Lightroom launches and opens the new catalog.



CREATE A NEW CATALOG WITH LIGHTROOM OPEN

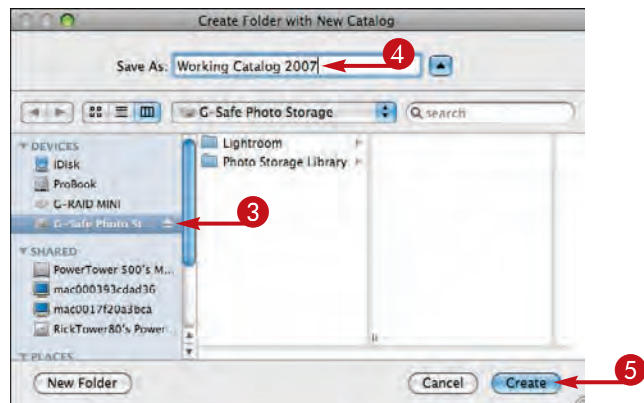
- 1 In the Library module, click **File**.
- 2 Click **New Catalog**.



A Create Folder with New Catalog dialog box appears.

Note: Optionally, click the down arrow (▼) changes to (▲) to expand the dialog box.

- 3 Navigate to and click the name of the storage location for the catalog.
- 4 Type a name for the new catalog in the text box.
- 5 Click **Create**.

**TIPS****Can I make Lightroom always open my new catalog by default?**

Yes. In the Select Catalog dialog box, check **Always load this catalog on startup** (☐ changes to ☑).

**Can I open multiple catalogs at one time?**

No. Although you can store multiple catalogs, such as a travel catalog, a family photo catalog, and a work projects catalog, Lightroom can recognize only one open catalog at a time. To switch to another catalog, click **File** and select **Open Catalog**. Lightroom closes and then relaunches with the other catalog. Multiple catalogs can share and display the same images from one storage location.



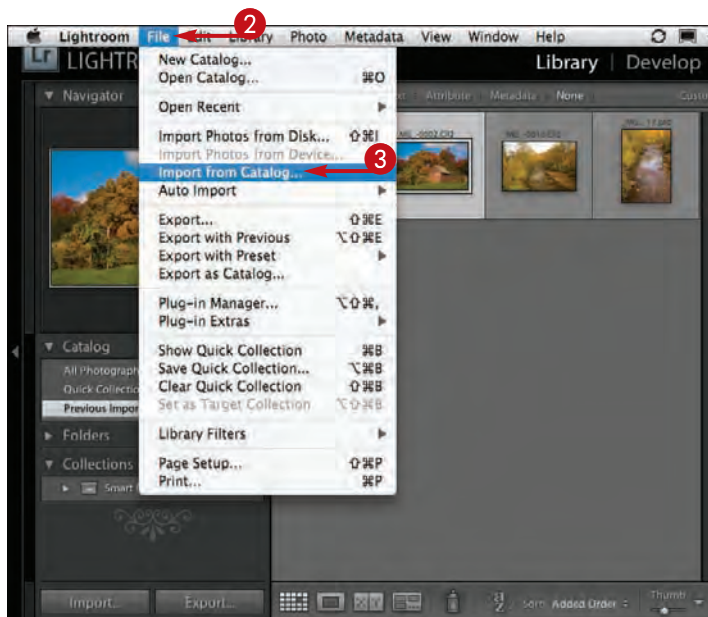
Import Photos from an Existing Catalog

You may have already created a Lightroom catalog and need to import specific photos or a group of photos to another catalog. You can have multiple catalogs, each with their own Catalog.lrcat file and Previews.lrdata file. You can also consolidate all your catalogs into one by importing the photos to a new or separate catalog.



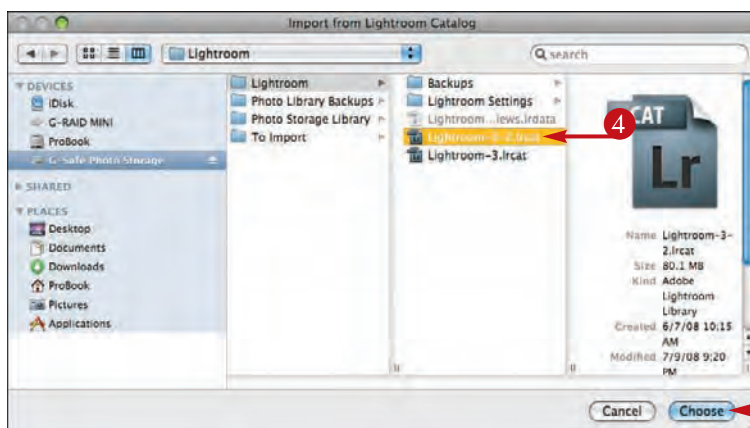
Import Photos from an Existing Catalog

- 1 Open Lightroom with a new or different catalog.
- 2 Click **File**.
- 3 Click **Import from Catalog**.



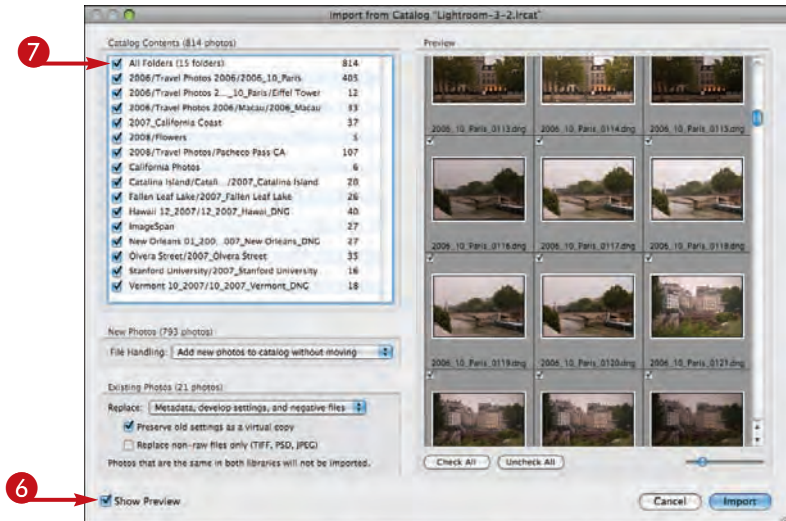
The Import from Lightroom Catalog dialog box appears.

- 4 Navigate to and click to select the catalog from which to import.
- 5 Click **Choose**.



The Import from Catalog dialog box appears with the existing catalog's name in quotation marks.

- 6 Click **Show Preview** (☐ changes to ☒).
- 7 Click to uncheck **All Folders** (☒ changes to ☐).

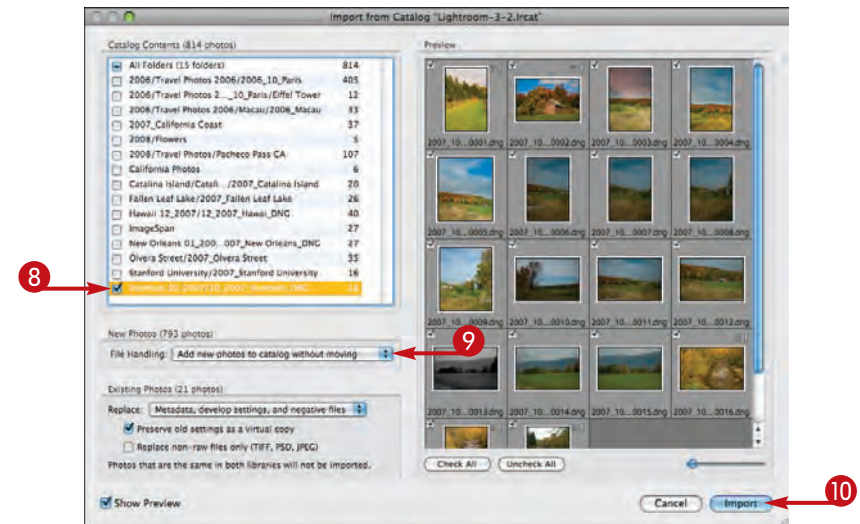


- 8 Click an individual folder of images from the existing catalog (☐ changes to ☒).
- 9 Click the **File Handling** button and select **Add new photos to catalog without moving**.

Note: Optionally, in the Preview area, click to deselect any individual photos you do not want in this new catalog.

- 10 Click **Import**.

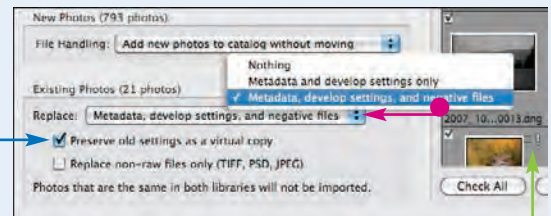
The selected photos are imported into the new catalog without moving the photo files from their current storage location.



TIP

What are the different Replace options in the Existing Photos section?

Lightroom analyzes both catalogs before it opens the dialog box. If any photos are already in the catalog, the existing photos display an alert (●). You can choose (●) to replace nothing, replace the metadata and develop settings, or replace the photo files as well. You can also save a copy of the older settings with a virtual copy (●) of the photo to preserve your previous work to the files.



Automate the Import Process

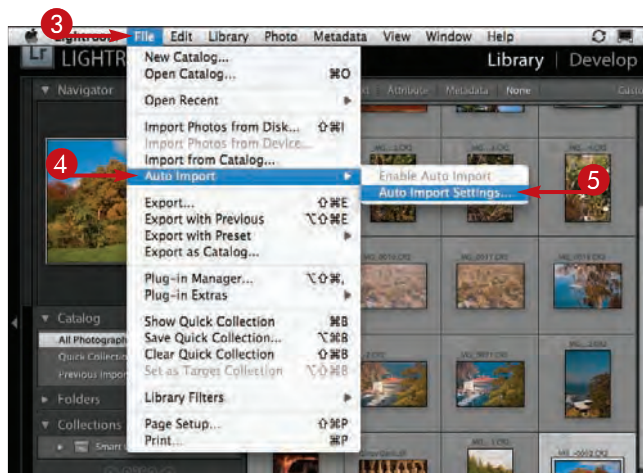
By default, Lightroom automatically launches the Import dialog box whenever a memory card is detected. Many photographers find this action disruptive and turn the option off in the Preferences. Instead, they use the Auto Import feature and set Lightroom to automatically import photos placed in a specific *watched* folder.

You can also use the watched folder for shooting tethered, with the camera connected directly to the computer, without using a memory card.



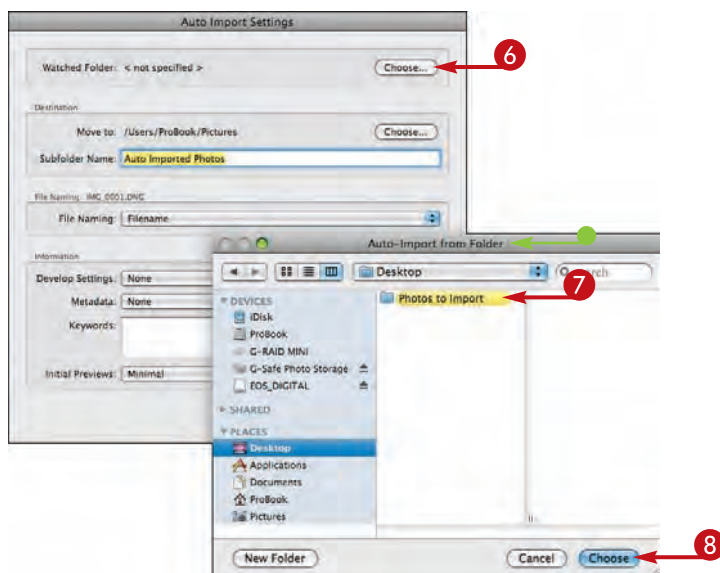
Automate the Import Process

- 1 Create a new empty folder in a convenient location such as the desktop.
 - 2 Name the folder Photos to Import
- Note:** You can name your watched folder anything that fits your naming system.
- 3 Click **File**.
 - 4 Click **Auto Import**.
 - 5 Click **Auto Import Settings**.



The Auto Import Settings dialog box appears.

- 6 Click **Choose** in the Watched Folder section.
- The Auto-Import from Folder dialog box appears.
- 7 Navigate to and select the Photos to Import folder you created in Step 1.
 - 8 Click **Choose**.



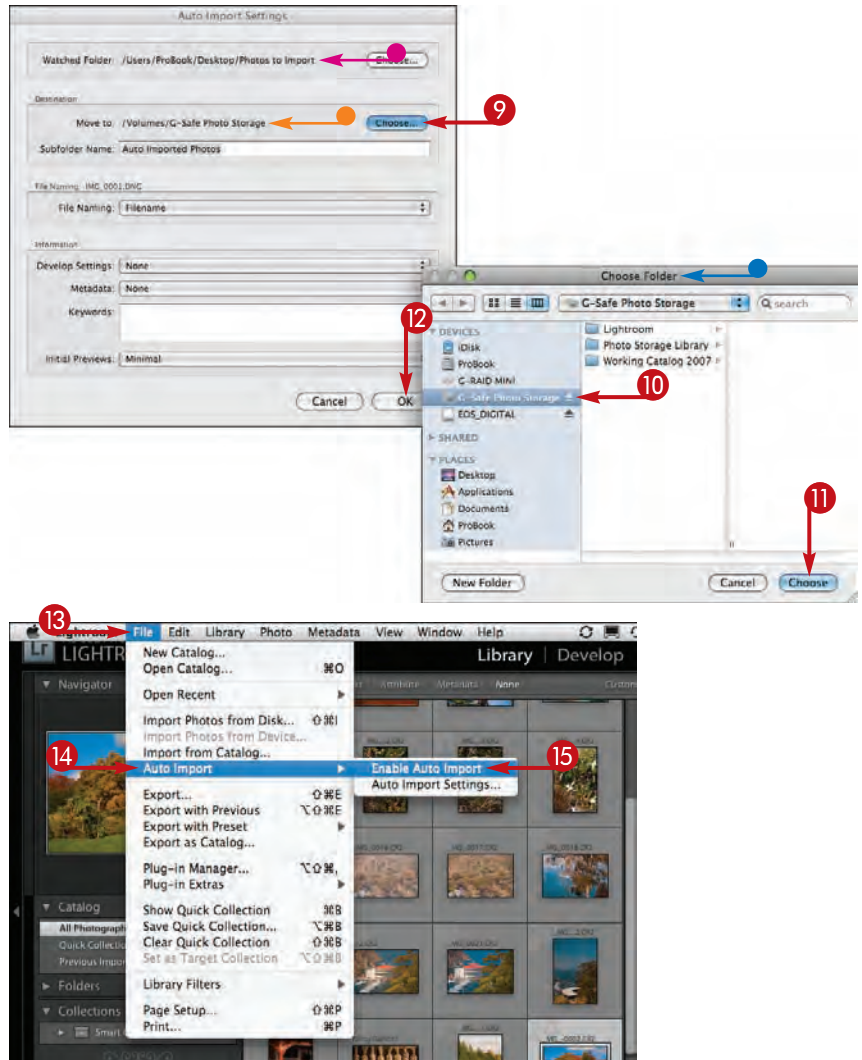
- The Photos to Import folder is listed as your Watched Folder in the Auto Import Settings dialog box.
- 9 Click **Choose** in the Destination section.
- The Choose Folder dialog box appears.
- 10 Navigate to and select a location to store the imported photos folder.

Note: The default location is the Pictures (My Pictures) folder on your main hard drive.

- 11 Click **Choose**.
- The Auto Import dialog box now shows both the name and location of your Watched Folder and the destination of the Auto Imported Photos subfolder.

- 12 Click **OK**.
- 13 Click **File**.
- 14 Click **Auto Import**.
- 15 Click **Enable Auto Import**.

The Auto Import feature is now activated and Lightroom automatically imports any photos placed in the watched folder into the Imported Photos folder.



TIPS

How can I stop Lightroom from automatically opening the import dialog box when I connect a memory card?

Click **Lightroom** and then click **Preferences** (click **File** and then click **Preferences** in Windows) to open Lightroom's preferences. Click the **Import** tab and click **Show import dialog when a memory card is detected** (checkbox changes to ☒)

What do I need to shoot directly from the camera into the computer without using a memory card?

Connect your camera to the computer using the USB cable that came with the camera. You also need software to go between your camera and Lightroom. Canon includes the Canon EOS Viewer free with their cameras. You can purchase other manufacturers' software, such as Nikon's Camera Control Pro 2, if it is not included. Set the camera software to download images to the watched folder you create in Lightroom.

Back Up During Import

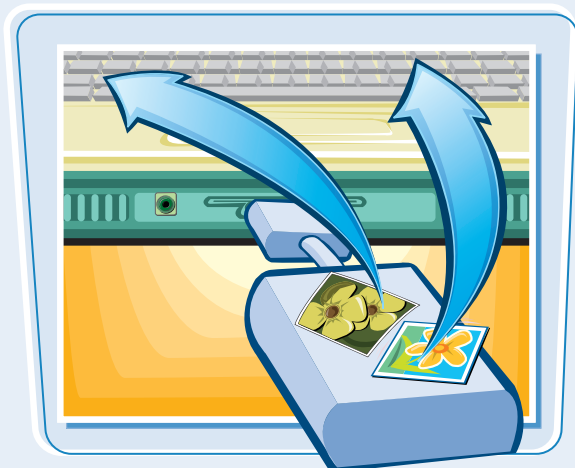
You can set Lightroom to automatically make a backup of the files as you import them. This is particularly important when you import images from a memory card or other removable media that you plan to reformat and reuse to continue shooting.

The last chapter of this book examines a variety of backup hardware options.



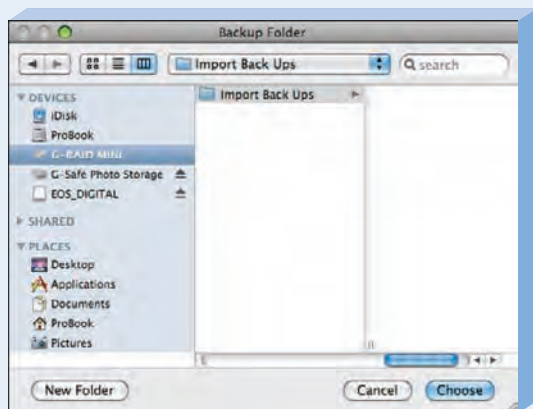
Back Up During Import to the Same Drive

When you are working in the field during a photo trip and have only a laptop for photo storage, you can have Lightroom back up the photo files to a separate location and folder on your hard drive.



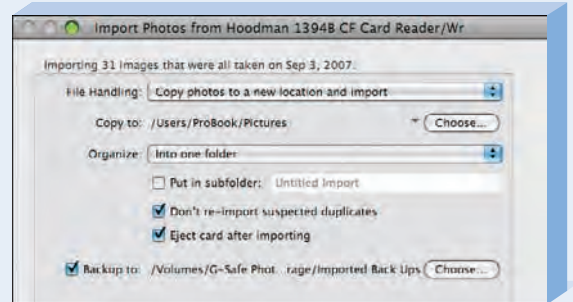
Back Up During Import to an External Hard Drive

You can set Lightroom to import and store the photo files on your main storage drive and back up the files at the same time to a separate external hard drive. This duplicate is more secure than two separate folders on one hard drive in case of hard drive failure.



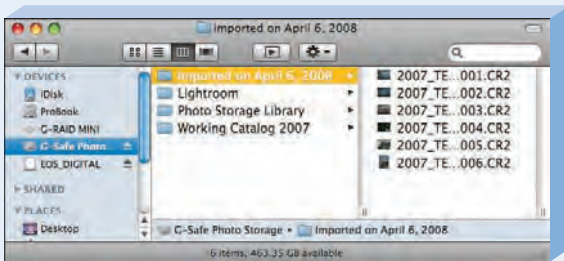
Set an Automatic Backup in the Import Dialog Box

Click **Backup to** (☐ changes to ☒) in the Import Photos dialog box and click **Choose**, and then select the location for the backup folder in the dialog box that appears. When you click **Import** in the Import Photos dialog box, the backup process becomes automatic and simultaneous.



Back Up Folder Name

When Lightroom backs up the files during import, it creates a backup folder named by the date of the import. All the backed-up photos on April 6, 2008, even from multiple import sessions or photos taken in 2007, will be in the Imported on April 6, 2008 folder.



More Backups

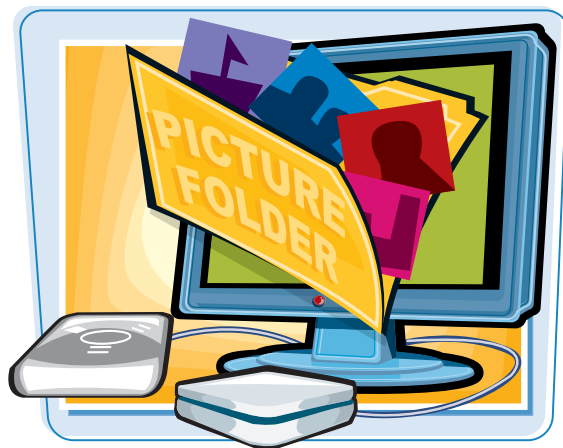
You can back up photo files automatically only if you are copying or moving photos. When you import photos at their current location, the automatic backup option is not available. You should always maintain at least two copies of all your valuable photo files on separate devices. You should also keep a backup copy of the Lightroom catalog to save any editing changes you make in Lightroom to the photos.



Build a Lightroom Library with External Drives

The user's Picture folder on the internal hard drive is Lightroom's default location for storing the catalog, previews, and photos. You can instead use larger external hard drives to store your entire photo library and another separate drive to store the backup of the photo files.

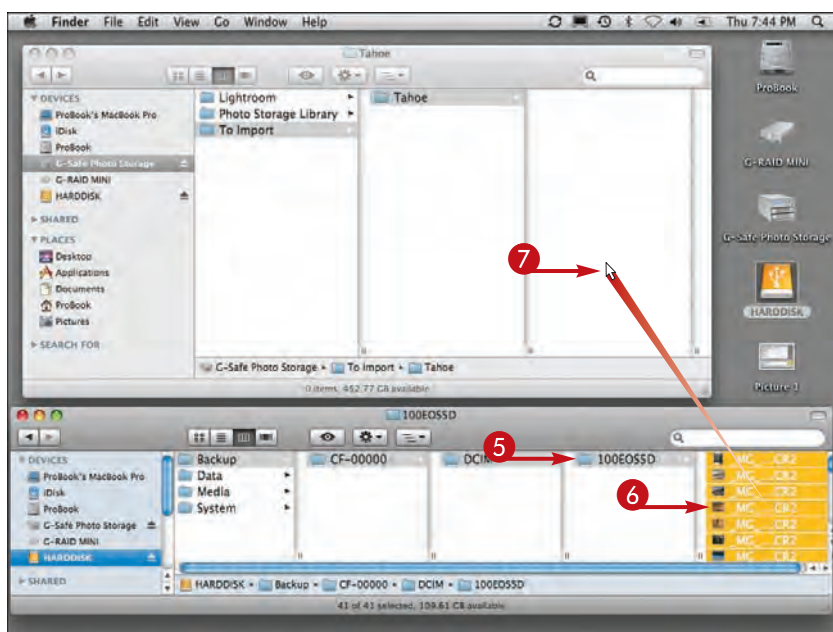
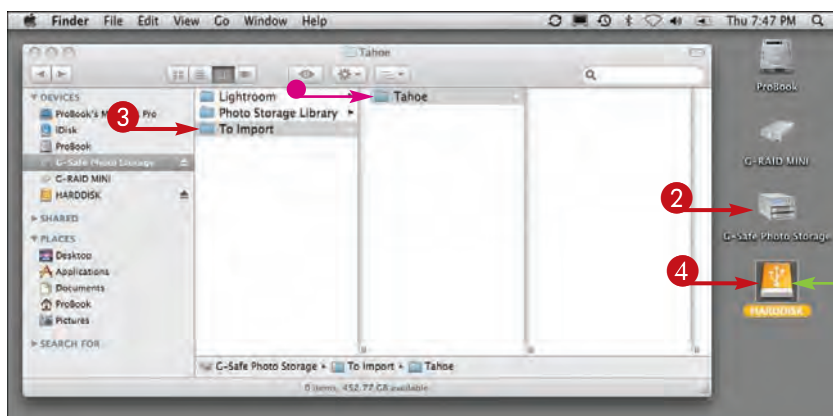
In this scenario, the photos are on a Digital Foci Picture Viewer and need to be copied and imported into Lightroom. The same scenario could be used for copying and importing from any type of travel hard drive or any other media with photos.



Build a Lightroom Library with External Drives

- 1 Turn on the picture viewer and connect it to the computer with the USB cable.
- 2 The Picture Porter Elite appears as an external drive named HARDDISK, on the desktop.
- 2 Double-click the main external photo storage drive.
- 3 Create a new folder called **To Import**.
- 4 You can create and name a specific folder to store the copied files within the To Import folder.
- 4 Double-click the picture viewer drive.
- 5 Navigate to the photos on the viewer.
- 6 Click + to select all the individual photos.
- 7 Click and drag the photos into the To Import folder, or the specific named folder inside.

The photos are manually copied to the main external storage drive.

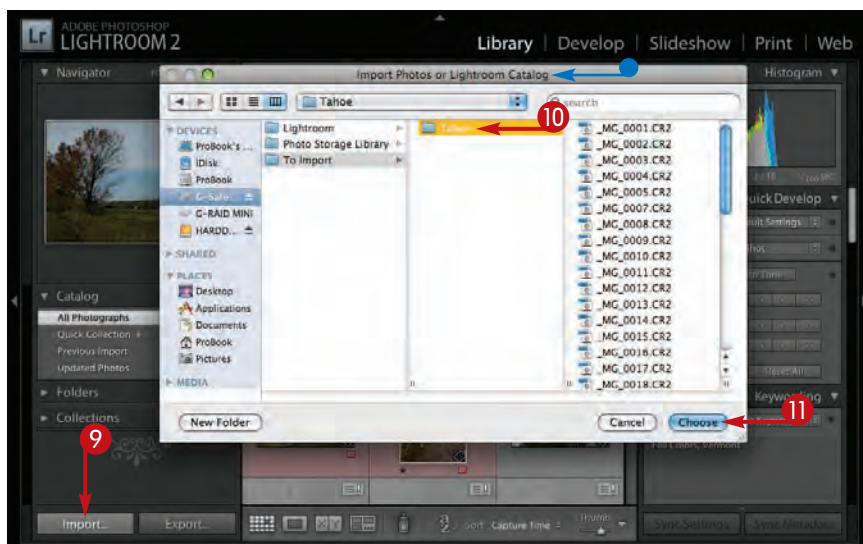


8 Launch Lightroom.

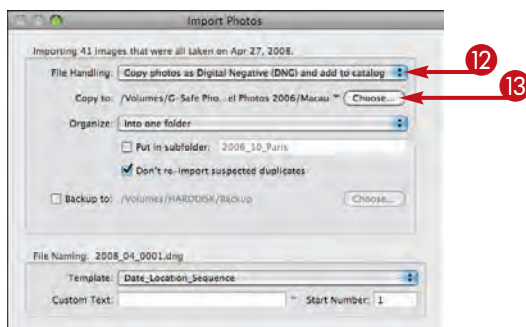
Lightroom opens in the Library module.

9 Click **Import**.

- The Import Photos or Lightroom Catalog dialog box appears.

10 Navigate to and click the **To Import** folder or select the specific folder if you created one in Step 3.11 Click **Choose**.

The Import Photos dialog box appears.

12 Click **File Handling** and click **Copy photos as Digital Negative (DNG) and add to catalog**.13 Click **Choose**.

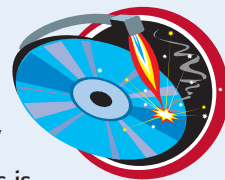
TIPS

Are there other advantages to using external drives to store the catalog and photos?

Yes. As your photo collection gets larger, Lightroom's catalog and preview files also increase in size. External hard drives provide more storage room. In addition, having the catalogs and the images stored on external drives makes the photo collection portable. If your main computer were to malfunction, you could easily access your files on another computer.

Can I burn the backup to DVD media?

Yes. You can create a backup folder on your main or any hard drive. In the Import Photos dialog box, click **Backup to** (the checkbox changes to ☒) , click **Choose**, and choose that folder. After the import process is finished, you can burn that folder to DVD media. You have to calculate the size of the folders to burn by how many megabytes or gigabytes can fit on the type of DVD media you use.



continued

Build a Lightroom Library with External Drives (continued)

Depending on the organization of your photo library and your storage space, you can either keep or delete the files you initially copied to your storage drive. If you plan to keep both the DNG and the original files, you may want to keep the original file names so both sets of photos match. You can always rename the photos in the Library module later.

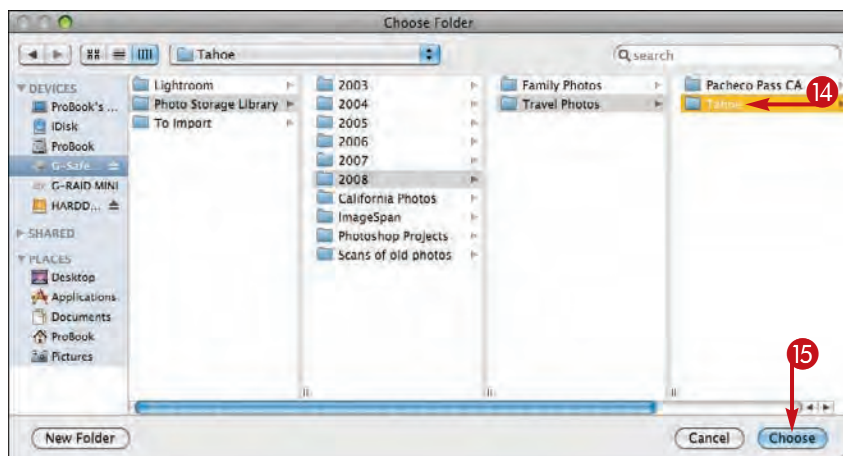


Build a Lightroom Library with External Drives (continued)

The Choose Folder dialog box appears.

- 14 Navigate to the folder on the storage hard drive.

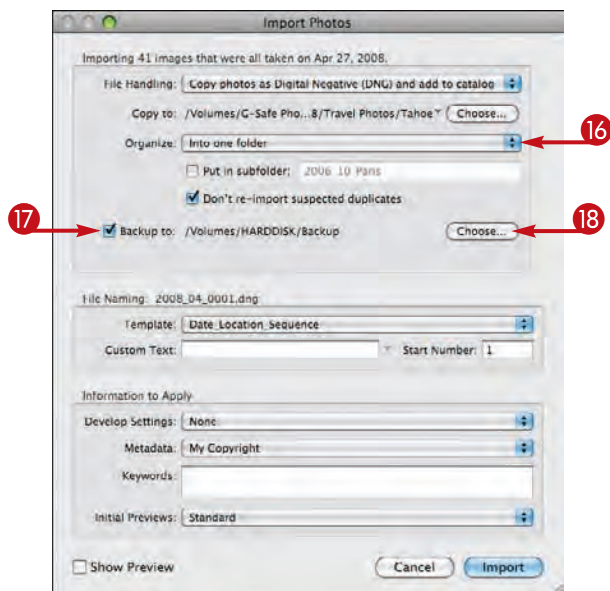
- 15 Click **Choose**.



- 16 In the Import Photos dialog box, click the **Organize** button and click **Into one folder**.

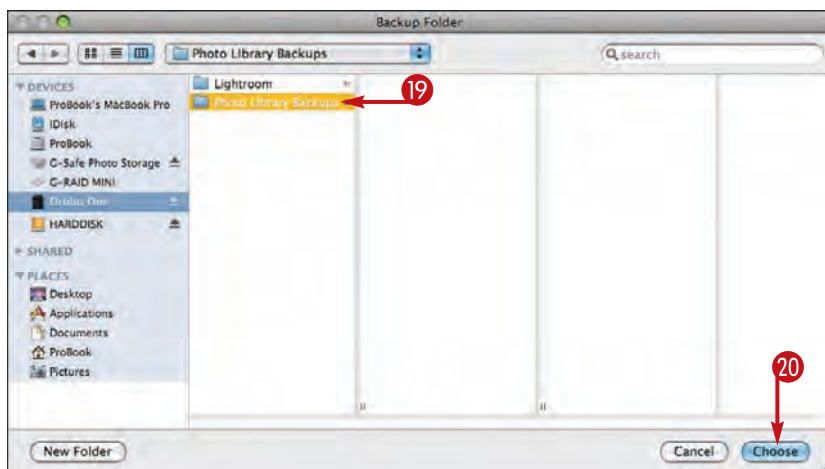
- 17 Click **Back up to** (the checkbox changes to checked).

- 18 Click **Choose**.



The Backup Folder dialog box appears.

- 19 Navigate to a separate location to store the photo backups.
- 20 Click **Choose**.

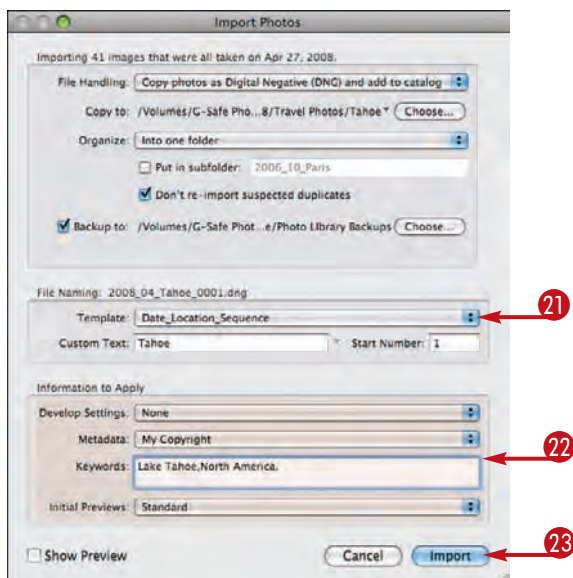


- 21 In the Import Photos dialog box, click the **Template** button and select your naming template preset.
- 22 Add any additional information.

Note: See earlier tasks in this chapter for more information about naming templates.

- 23 Click **Import**.

You have now built the foundation for your Photo Library storage on external hard drives.



TIP

What is the difference between the Backup catalog option in the Catalog Settings dialog box and the backup up in the Import Photos dialog box?

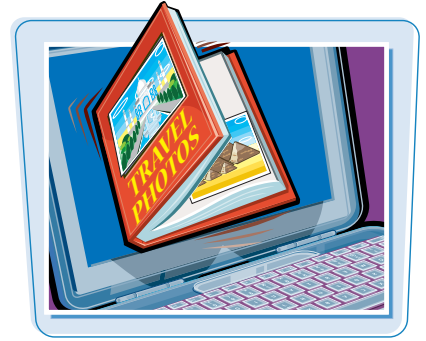
- **Back up catalog** in the Catalog Settings dialog box tells Lightroom how often to make a copy of your catalog database. When you launch Lightroom and the backup dialog box appears, you can select a storage location for the backup catalog. This backup contains all the edits and metadata, and provides security and preserves any editing or sorting work you have done to your photos, if your main catalog is ever lost or corrupted.
- Selecting **Backup to** in the Import Photos dialog box has Lightroom make a duplicate set of the photo files you import and lets you specify a location to store the files. This backup maintains a second copy of your original unedited images.



Combine a Travel Catalog with Your Main Lightroom Library

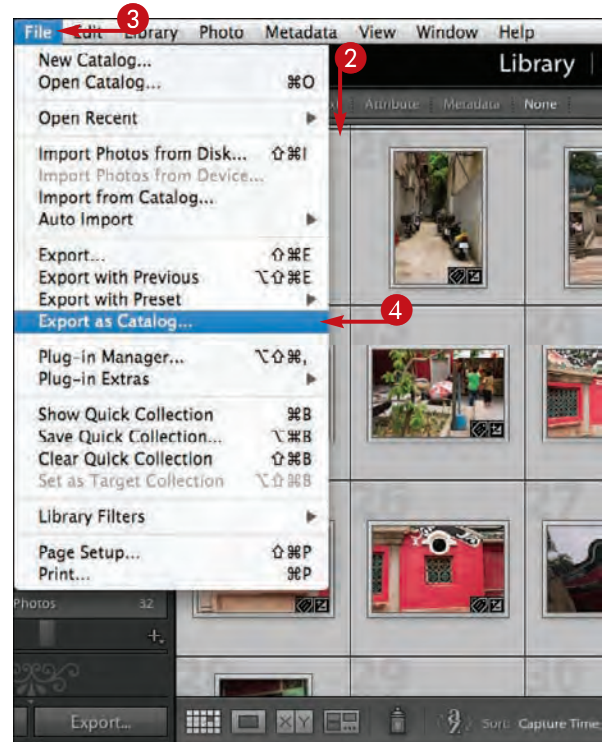
If you use Lightroom to import photos and create a catalog on a laptop during a trip, you can easily add the travel catalog data to your main Lightroom catalog and copy the images to your main storage library when you return.

In this scenario, both the catalog and photo files are on a travel laptop. The laptop's catalog needs to be imported into the main Lightroom catalog on a desktop computer and the photo files need to be copied and stored on the main computer's storage drive.



Combine a Travel Catalog with Your Main Lightroom Library

- 1 Open the Travel Catalog in Lightroom on the laptop.
- 2 In the Library module, press **⌘ + A** (**Ctrl + A**) to select all the photos in the catalog.
- 3 Click **File**.
- 4 Click **Export as Catalog**.



The Export as Catalog dialog box appears.

- 5 Click in the text box and type a name for the exported catalog folder.
- 6 Click the **Where** button and select a destination for the catalog folder.

Note: This task uses a separate external hard drive to make the transfer. You can export to any external media, or export to another location on the laptop and use Ethernet or Wi-Fi to connect the computers and make the transfer in Steps 12 to 17. You can also connect a Mac laptop in Target Disk mode with a FireWire cable.

- 7 Click **Export negative files** (☐ changes to ☒.
- 8 Click **Include available previews** (☐ changes to ☒.
- 9 Click **Export Catalog**.



Lightroom exports the catalog and photos to the selected location.

- 10 Quit Lightroom and eject the external drive from the laptop. Connect the external drive to your desktop computer.
- 11 Launch your main Lightroom catalog on the desktop computer.

12 Click **File**.

13 Click **Import from Catalog**.

- The Import from Lightroom Catalog dialog box appears.

14 Navigate to the external drive with the exported travel catalog.

15 Click **Choose**.

The Import from Catalog “catalogname.lrcat” dialog box appears.

16 Click the **File Handling** ▾ and select **Copy new photos to a new location and import**.

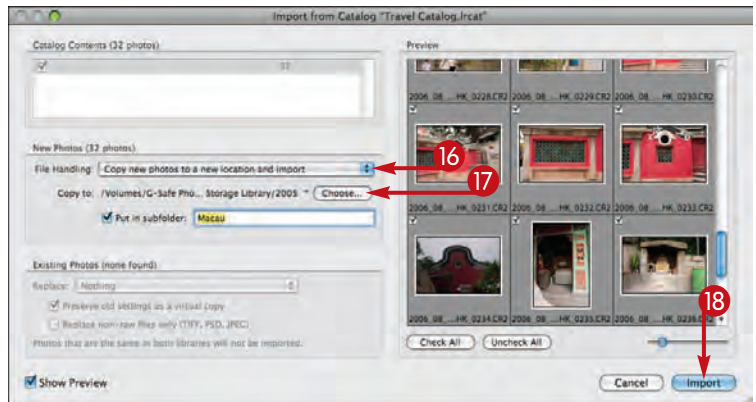
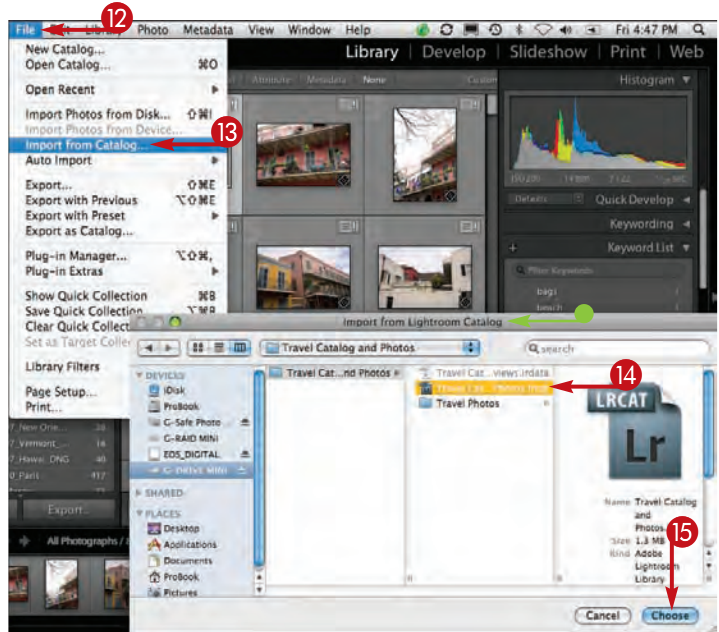
17 Click **Choose** and navigate to the new storage location for the photo files.

Note: Optionally, click **Put in subfolder** and type a name in the text box.

18 Click **Import**.

Note: If a box appears regarding a naming template, click **OK**.

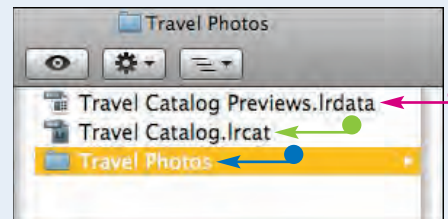
Lightroom imports the catalog data into the main catalog and puts the photo files (also called negatives) in the new storage location.



TIP

What files does Lightroom export with these settings?

Lightroom exports a copy of the database *catalogname.lrcat* (●), along with the *catalogname Previews.lrdata* file (●) and a folder with the original photo files (●). If you export RAW files, be sure to check **Automatically write changes into XMP** in the Metadata tab of the Catalog Settings preferences. That way any edits you have already made are exported with and attached to the photo files.



CHAPTER

3

Viewing and Organizing Your Photos



The Library is the default module for Lightroom. The Library module functions like a giant light table for viewing all the photos in your catalog, and in addition gives you powerful tools to rate, sort, compare, and organize your images. It is also the central hub for all of Lightroom's modules.

Locate the Parts of the Library Module.....	60
Change the Library Views	64
Using a Second Window	66
Adjust the Lights	70
Change the Display of the Side Panel Sections	71
Change Your Library View Options	72
Customize the Library Toolbar	74
Rename a Group of Photos.....	76
Tag Your Photos for Easier Sorting	78
Filter Your Photos	80
Organize Your Photos with Folders	82
Synchronize Folders That Have Changed	84
Group Your Photos into Collections	86
Create a Smart Collection	88
Group Collections into a Collection Set.....	90
Make a Quick Collection	92
Convert a Quick Collection to a Permanent Collection	94
Add Keywords to Your Photos	96
Add Keywords with the Painter Tool	98
Create Custom Keyword Sets and Hierarchical Lists.....	100
Create an Image Stack	102
Remove or Delete Photos from Lightroom	104

Locate the Parts of the Library Module

The Library module is where you import, sort, rate, organize, compare, select, delete, export, and rename the photos in your Lightroom catalog. It is the key to handling large numbers of photos. Getting familiar with the parts and functions of the Library module makes handling all your digital images more fluid and intuitive.

● **Library central viewing area**

The Grid view

The grid default view displays all the photos in the selected catalog, folder, or collection.

Scroll bar

Click and drag the scroll bar to scroll through the thumbnails.

● **Library Module Top Filter bar**

The Top Filter bar expands so that you can filter and sort your photos using different parameters, such as the date a photo was shot, camera or lens used, location text, or any custom filters you apply. The parameters, from the left:

Text

Text filters let you sort using any combination of words applied to the photos, such as file names and metadata.

Attribute

Sorting attributes include pick or reject flags, star ratings, and color labels.

Metadata

Metadata filters let you filter by date, camera or lens used, or labels.

● **Custom filters**

Custom filters can be created and saved using any combination of settings.

● **Library Module toolbar**

You can add tools to the toolbar as you need them. The tools, from the left:

View mode buttons

Click to view in Grid, Loupe, Compare, or Survey modes.

Painter tool

Apply keywords with the tool.

Reverse sort order

Select sort parameters

Change thumbnail size

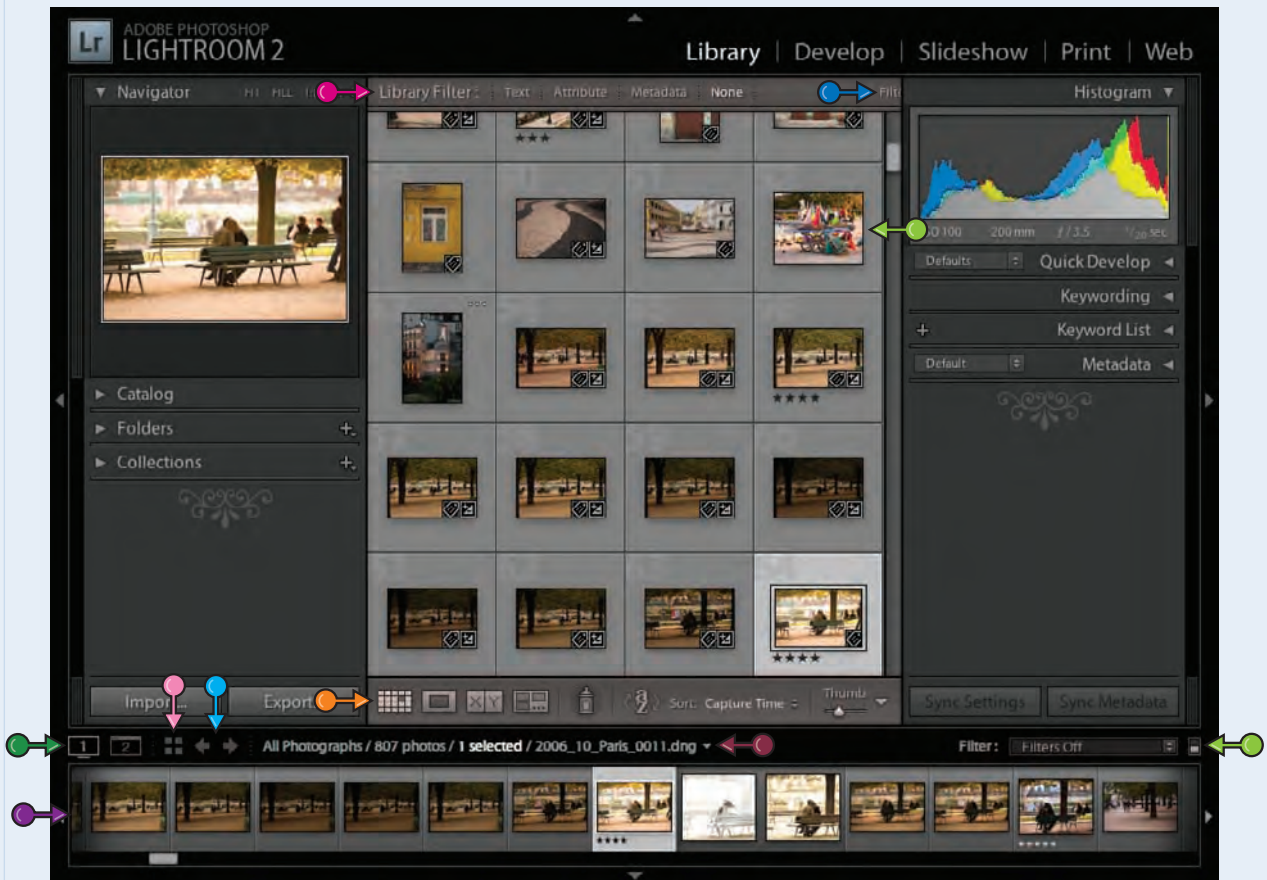
You can add other tools for flagging, rating, and labeling; navigating through the photos; starting an impromptu slide show; and viewing the file name.

Filmstrip and Filmstrip tools

The Filmstrip appears in every module. The Filmstrip includes, from the left:

Thumbnails of the images in the selected folder

- Main and second window buttons
- Grid view button
- Navigation buttons
- Photo location
- Filter menu and on/off switch



Locate the Parts of the Library Module *(continued)*



The Library module acts as a central hub for the rest of the application. Lightroom always opens in the Library module, and you will constantly jump back to this initial module as you import, sort, and enhance your photos.

● Library Module left panel


● Navigator section

The Navigator displays the selected photo. Click to select the quick Zoom level for the Loupe view.




Catalog section

Click **All Photographs** to view all photos in the entire catalog. Click **Quick Collection** to view only the Quick Collection. Click **Previous Import** to view only the last images imported.

● Folders section

The Folders section shows all the folders in the Lightroom catalog and their various locations, even on separate hard drives. If necessary, click  to open the location and click a folder to view only the photos in that folder.

Collections section

The Collections section shows groups of photos independent of their individual folders. A folder icon with a star  indicates a *Smart Collection*. A folder icon  indicates a named collection. A file box icon  indicates a *Collection Set*.

● Import and Export buttons

The Import button enables you to quickly import new photos from various sources and the Export button takes you to the various export options in the Export dialog box.

● Library Module right panel

Histogram

The Library Histogram shows a graphical representation of the color and tonal values in the selected image.

Quick Develop section

In the Quick Develop section, you can apply general photo corrections and presets to one or multiple images.

Keywording section

In the Keywording section, you can create and assign keyword tags and group the words into Keyword sets.

Keyword List section

In the Keyword List section, you can view and group your existing keywords hierarchically.

Metadata section

The Metadata section displays the data automatically included by the camera or added by the photographer.

Panel end marks

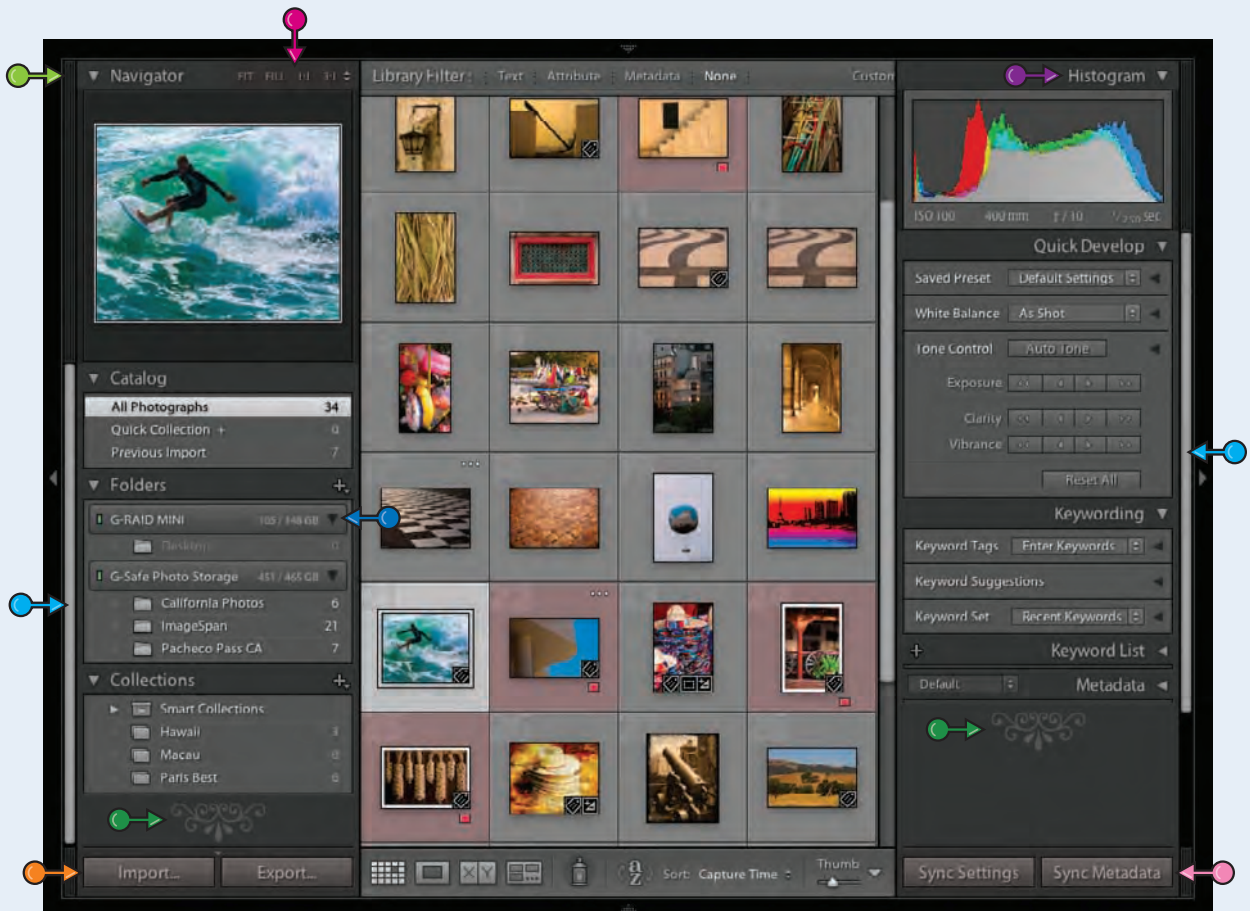
The panel end marks are used to show there are no more options in the panel. You can customize these ornaments in the Lightroom Preferences.

Sync Settings and Sync Metadata buttons

The Sync Settings and Sync Metadata buttons are activated when two or more photos are selected and are used to synchronize the edits or metadata applied to one photo with the other selected photos.

Scroll bars

The scroll bars let you access the various sections of the panels when they are expanded.



Change the Library Views

Lightroom's Library module enables you to view your photos in a variety of ways. Not only can you make the viewing area larger (see Chapter 1), you can also choose to view images in a variety of ways: in a grid, one image enlarged, two images as a comparison, multiple images, and so on.



Change the Library Views

1 Open Lightroom.

Lightroom opens by default in the Library Grid view with one image showing in the Navigator contents of the left panel.

2 Click **Loupe View** .



The central viewing area changes to the Loupe view mode and displays the selected photo to fit.

3 +click (Ctrl+click) any other photo in the filmstrip to select it while keeping the first photo selected.

4 Click **Compare View** .



The central viewing area changes to the Compare view mode and displays the two photos.

5 Press **Tab**.

The side panels are hidden, making the photos in the central viewing area larger.

6 **⌘**+click (**Ctrl**+click) additional photos in the filmstrip to select them while keeping the first two photos selected.

7 Click **Survey View** ().



The central viewing area changes to the Survey view mode and displays the selected photos.

• The first selected photo is indicated by a brighter white border.

8 **⌘**+click (**Ctrl**+click) any of the photos to remove it from the viewing area.

Note: Optionally, click **Remove Photo** (X) to remove a photo from the viewing area.

The viewing area dynamically adjusts to the remaining photos.



TIPS

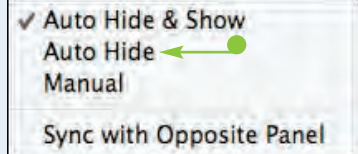
When my cursor rolls over the left or right side, the panels reappear temporarily. Can I change this and still make my central area large?

Pressing **Tab** toggles on and off the side panels. You can manually make one side appear and stay open by clicking **⏏** or **⏏** on that side.

Is there any other way to change the behavior of the side panels?

Yes. **Control**+click (right-click) either **⏏** or **⏏** by the left panel to get a menu. Click **Auto Hide** (●).

From now on, the left panel reappears only when you click **⏏** or when you toggle both panels on by pressing **Tab**. Repeat the steps on the right to see that panel's behavior or click **Sync with opposite panel** to make both sides respond to the same setting.



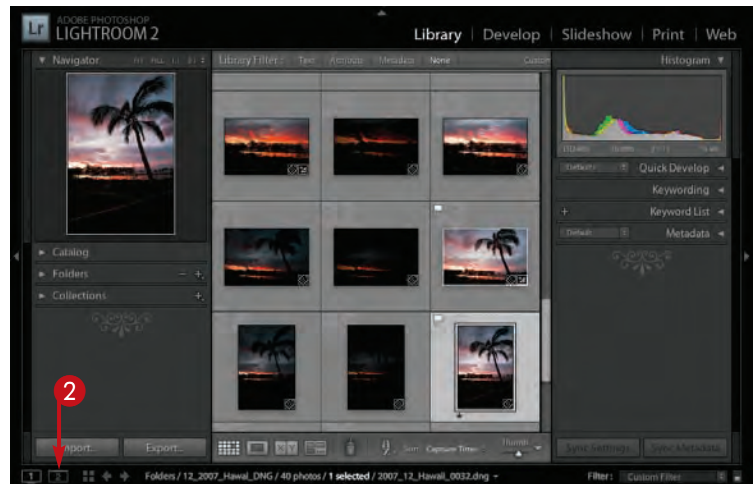
Using a Second Window

Lightroom includes a second window viewing option. You can use this window on a second monitor or just as a second window on one large monitor. The second window offers three different modes, Normal, Live, and Locked, and makes it easy to click through images in the Grid view in one window while viewing each image enlarged in the Loupe view at the same time.



Using a Second Window

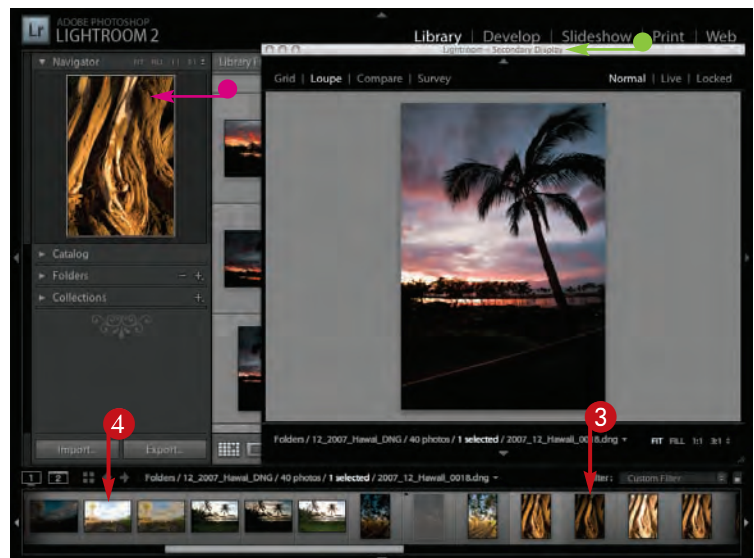
- 1 Open the Library module in the Grid view mode.
- 2 Click **Second Window** (icon).



- The second window appears with the selected photo in the Loupe view.

Note: Optionally, click and drag the bottom right corner of the second window to enlarge it and move it to a second monitor if you have one.

- 3 Position the cursor over another image in the Filmstrip but do not click.
- The other image appears in the Navigator panel.
- 4 Click another image either in the Filmstrip or the Grid view of the main window to select it.



The image in the second window changes to match the one selected in the first window.

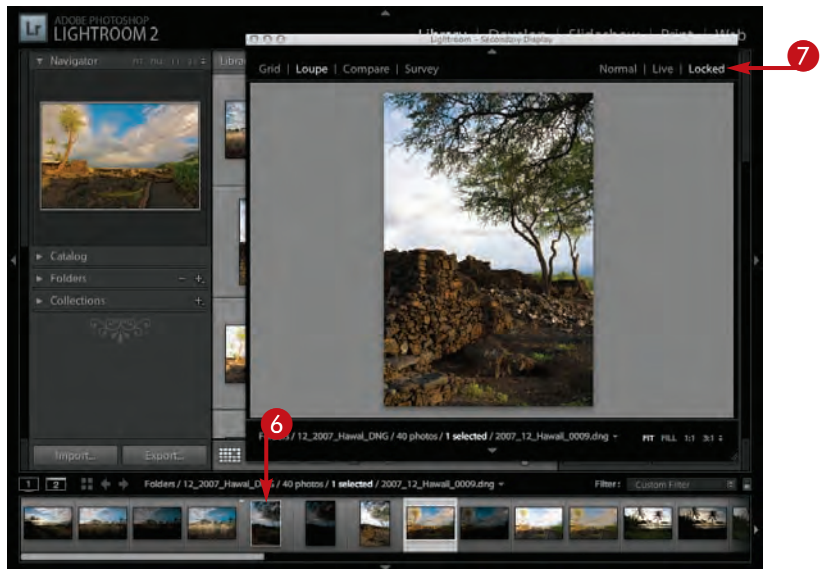
- 5 Click **Live** in the second window.



- 6 Position the cursor over the other images in the Filmstrip or the Grid view of the main window, but do not click.

The second window shows the live Loupe view of the images as you move over them.

- 7 Click **Locked** in the second window.



TIPS

Is there a way to enlarge the image in Loupe view in the second window?

Yes. Click **Loupe** in the second window. The cursor appears as a magnifying glass (🔍). The photo zooms to the zoom default you have selected in the main window, such as 1:1. Click again and it returns to the view you have selected, such as Fit.



Can I change the background color of just the second window?

Yes. You can **Control**+click (right-click) the gray background and select another gray, white, or black. The background color changes for the second window only.

Using a Second Window (continued)

The second window is also useful when presenting photos to clients. With the second window in Loupe view on another monitor, you can go through your catalog of images while showing the client only the photos you push to the second monitor.



Using a Second Window (continued)

The second window locks the Loupe view of the originally selected photo.

- 8 Position the cursor over the other images in the Filmstrip or the Grid view of the main window, but do not click.

The second window remains locked on the originally selected photo, but the Navigator displays the photos as you move the cursor over other thumbnails.

- 9 Click another photo in the grid or Filmstrip on the main window.

The second window still displays the locked Loupe view of the originally selected photo.

- 10 Press **Option** + **Return** (**Alt** + **Enter**).

The photo selected in the main window is pushed to the Loupe view of the locked second window.

- 11 **⌘** + click (**Ctrl** + click) a second photo in the Filmstrip or Grid of the main window.

- 12 Click **Compare** in the second window.





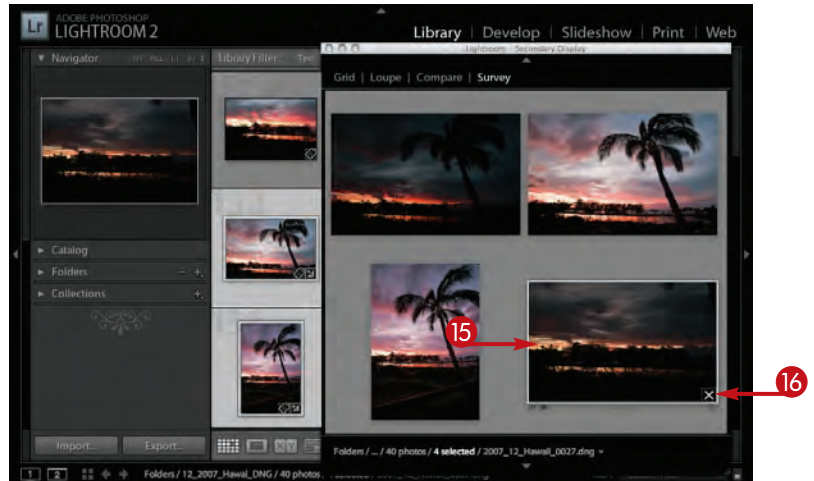
The second window shows an enlarged view of both photos in the Compare mode.

- 13 ⌘+click (Ctrl+click) additional photos in the Filmstrip or grid.
- 14 Click **Survey** in the second window.



The second window shows an enlarged view of the selected photos in the Survey mode.

- 15 Click a photo to be removed from the survey.
- The photo appears with  in the corner.
- 16 Click  to remove the photo from the Survey mode view.



TIPS

Can I use the second window to display the Grid view also?

Yes. You can use either Grid or Loupe views on either the main or second window.

Can I use another module with the second window open?

Yes. For example, you can view either the Grid or Loupe view on the second window and work on the image in the Develop module on the main window.



Adjust the Lights

Lightroom was created to let you focus on your photos as you view and organize them. You can dim the areas surrounding a selected photo or turn the surrounding area completely black in any of the modules to get a better view of an image.

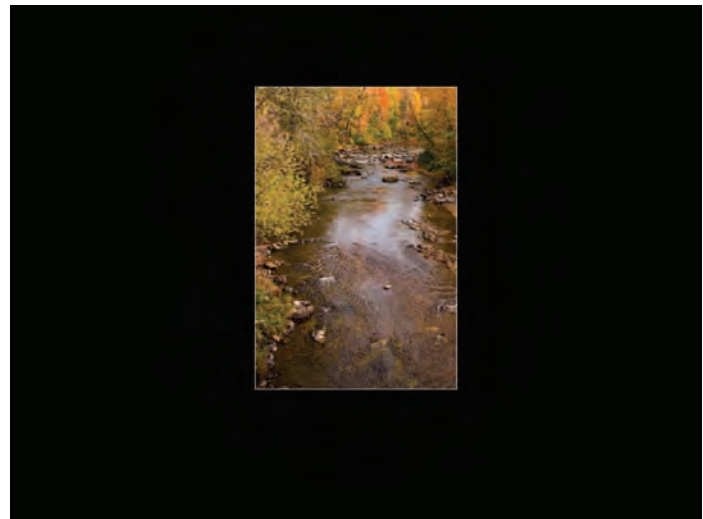


Adjust the Lights

- 1 Click a photo to select it.
- 2 Press **E** to go to Loupe view.
- 3 Press **L**.
The surrounding areas dim.
- 4 Press **L** a second time.

The surrounding areas turn black.

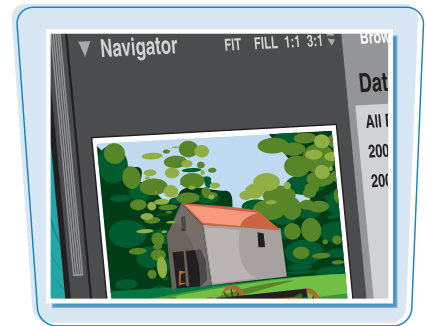
- 5 Press **L** a third time.
The screen returns to the normal view.



Change the Display of the Side Panel Sections

chapter 3

Depending on the size of your monitor, you must scroll to see all the options in each separate section on the side panels. You can arrange the side panels with only one section open at a time and use the sections more effectively.



Change the Display of the Side Panel Sections

- 1 In the left panel, **⌘**+click (Ctrl+click) the **Catalog** ▾.



All the left panel contents sections, except for the Navigator, close at once (▾ changes to ►).

- 2 In the right panel, **⌘**+click (Ctrl+click) the **Quick Develop** ▾.

All the right panel contents sections close at once (▾ changes to ►).

- 3 Click any ► or ◀ to open only that side panel section.



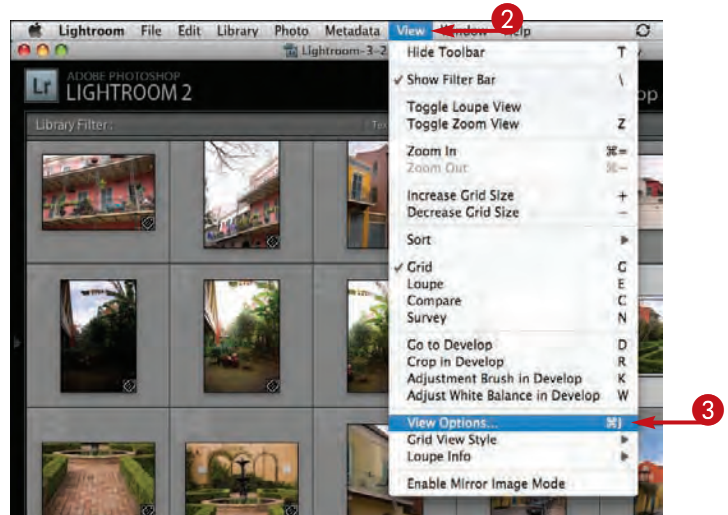
Change Your Library View Options

You can view your photos in many different ways in Lightroom. You can customize the View Options for the Library module to show different sized cells and information in the Grid view and different overlay information in the Loupe view.



Change Your Library View Options

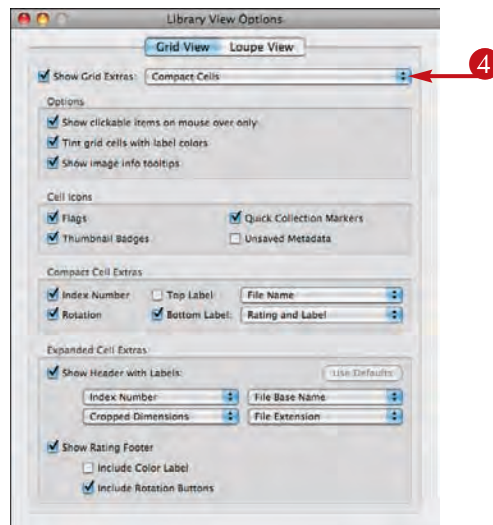
- 1 Press **Tab** to hide the side panels.
- 2 Click **View**.
- 3 Click **View Options**.



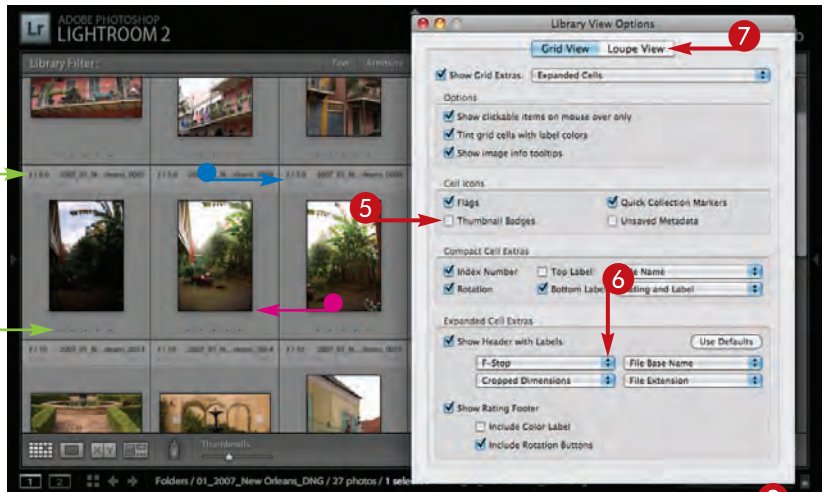
The Library View Options dialog box appears.

Note: The selections listed in the steps are suggestions for setting preferences. You can change the preferences to fit your projects.

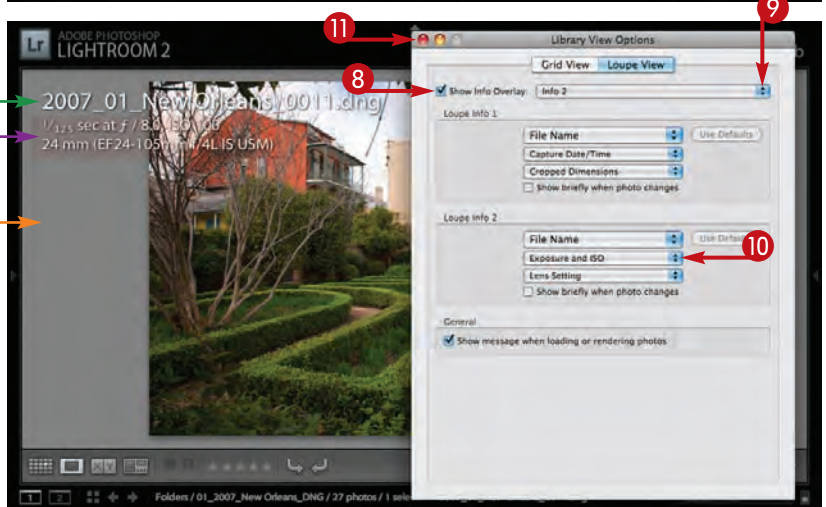
- 4 Click the **Compact Cells** button and select **Expanded Cells** in the menu that appears.



- The grid cells expand in the Grid view.
- 5 Under Cell Icons, click **Thumbnail Badges** (✓ changes to ☐).
- The thumbnail badges are removed from the grid cells.
- 6 Click an **Expanded Cell Extras** (⬇) and select **F-Stop**.
- The F-Stop appears in the cell header.
- 7 Click **Loupe View**.



- The viewing area changes to Loupe view.
- 8 Click **Show Info Overlay** (☐ changes to ✓).
- The photo info appears over the photo.
- 9 Click the **Show Info Overlay** (⬇) and select **Info 2**.
- 10 Click a **Loupe Info 2** (⬇) and select **Exposure and ISO**.
- The Exposure and ISO appear as an overlay.
- 11 Click (X) to close the dialog box.



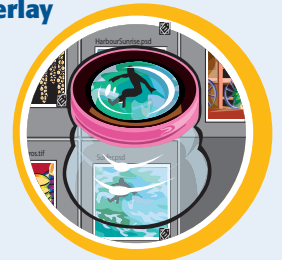
TIPS

Can I turn off all the added information and view just the photos in a grid?

Yes. In the Grid View tab of the Library View Options, click **Show Grid Extras** (✓ changes to ☐).

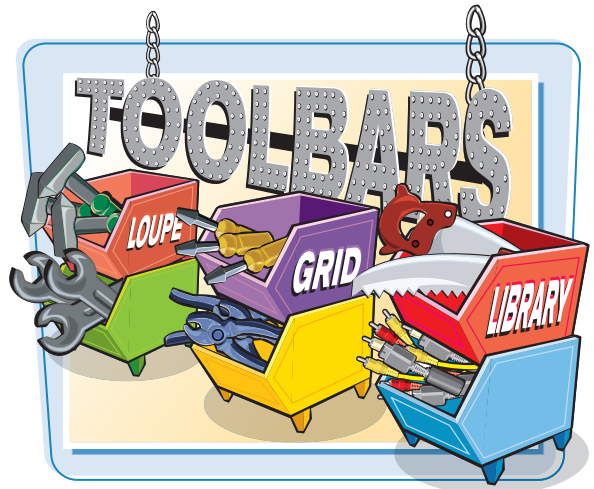
How can I set the Loupe view Info Overlay to appear and then click it off?

In the Loupe view, press **I** once to view the Overlay for Info 1. Press **I** a second time to view Info 2. Press **I** a third time to turn the Info Overlay off.



Customize the Library Toolbar

The tools available in Lightroom's toolbar vary with each module. In the Library module, the toolbar has tools for changing the view modes plus tools for adding rating tags, a thumbnail size slider, navigational and rotational tools, and more. You can add tools to the toolbar as you need them.



Customize the Library Toolbar

ADD TOOLS TO THE TOOLBAR

Note: Your toolbar may already have some tools on it. The following steps are for illustration purposes. You can select any of the options to fit your projects.

- 1 Click **Grid View** (⌘).

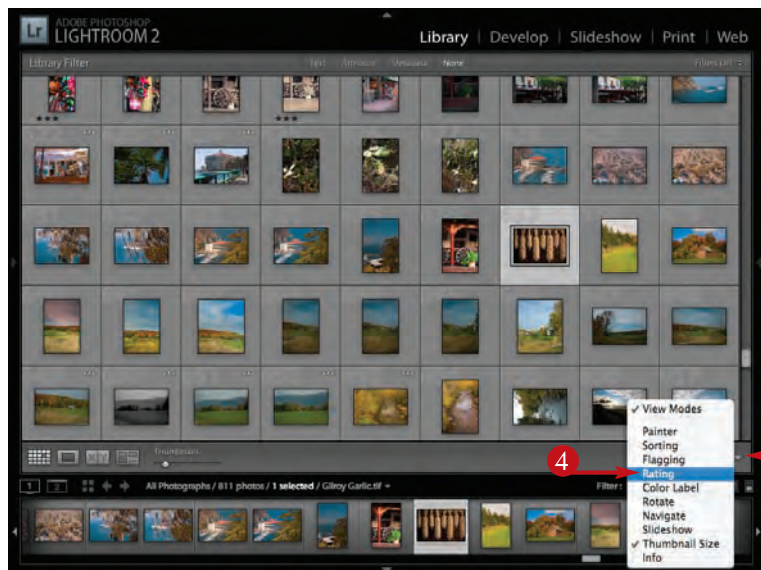
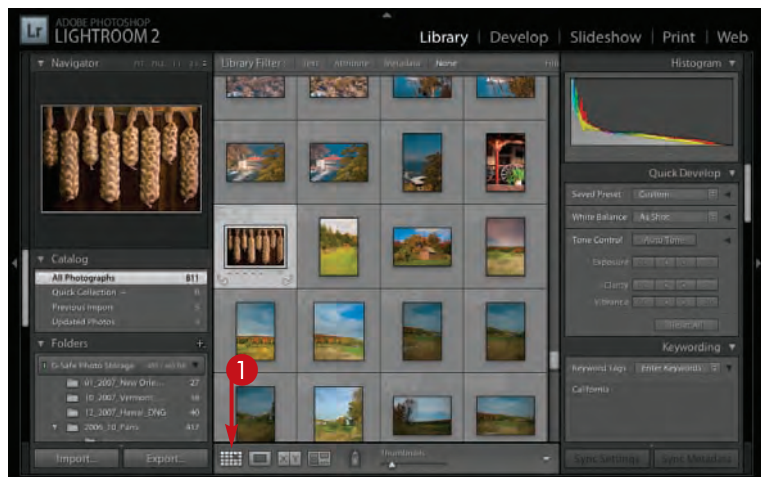
The view mode changes to Grid view.

- 2 Press **Tab**.

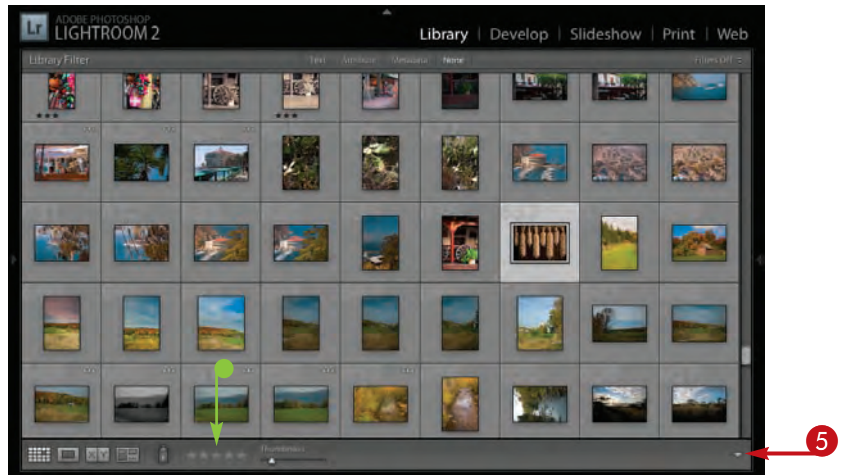
The side panels hide, revealing a full-sized toolbar.

Note: All the tools may not be visible in the toolbar with the two side panels showing.


- 3 Click ▾.
- 4 Click **Rating**.



- Five stars are added to the toolbar.
- 5 Repeat Step 3 and choose other tools to add to the toolbar.

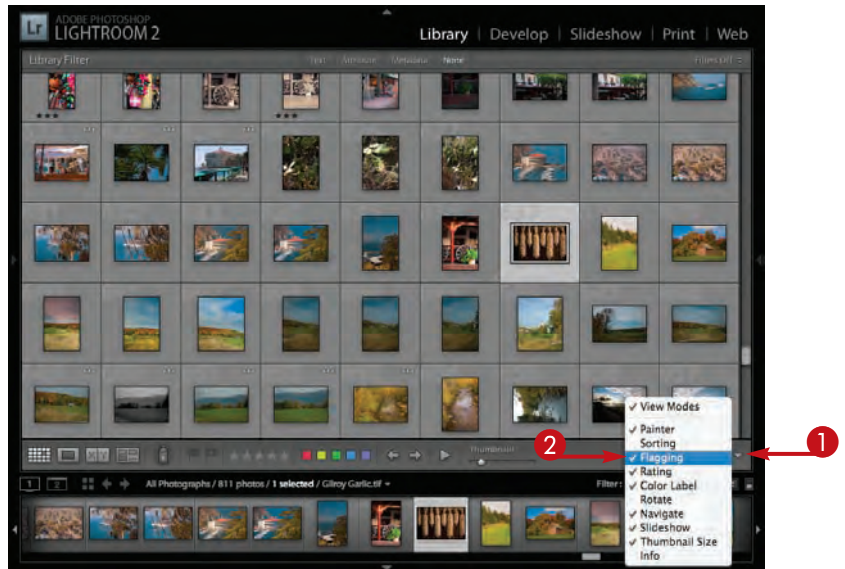


REMOVE TOOLS FROM THE TOOLBAR

- 1 Click .
- 2 Click any of the checked tools to remove them from the toolbar.

The tools disappear from the toolbar.

- 3 Repeat Steps 1 and 2 to remove any other tools.



TIPS

Why can I not see the toolbar?

The toolbar can be hidden to enlarge the viewing area. Press **T** to toggle it on and off.



Why did the tools I added to the toolbar disappear when I went to Loupe view?

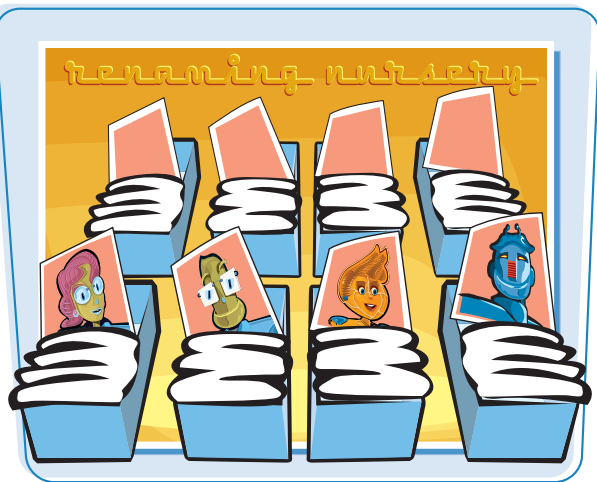
The toolbar tools are specific to each module and set for each view mode independently. You can set up the ones you want while in the Loupe view following the steps in this task.



Rename a Group of Photos

If you imported photos already on your hard drive and selected Import Photos at Their Current Location, the existing file names were not changed. You can easily rename a group of photos already in Lightroom in the Library module.

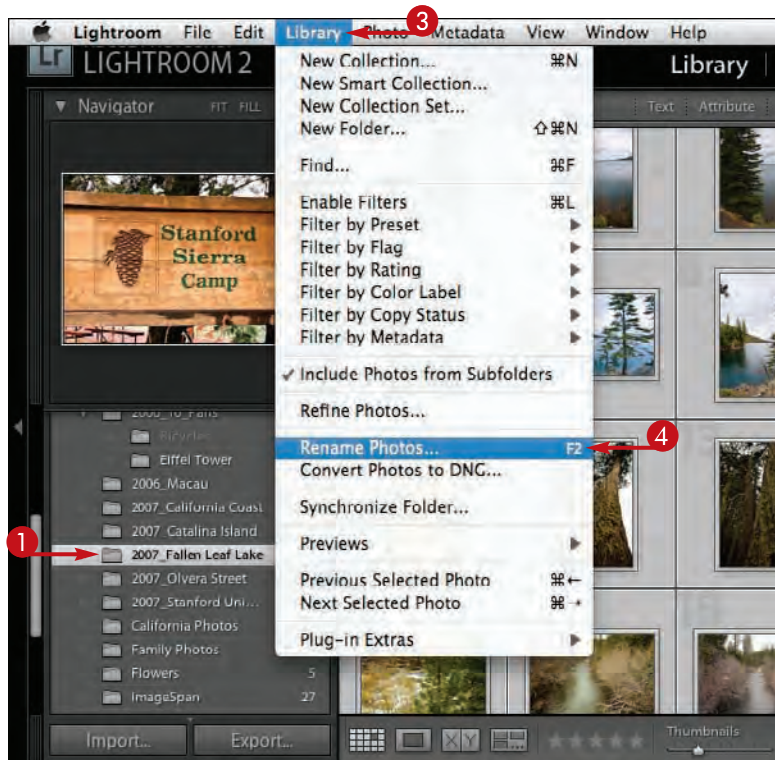
See Chapter 2 for more about importing photos.



Rename a Group of Photos

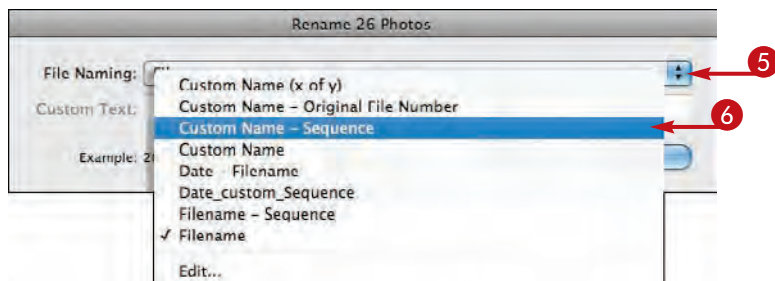
- 1 Click a folder or collection previously imported from the disk.
- 2 Press **⌘+A** (**Ctrl+A**) to select all the photos.
- 3 Click **Library**.
- 4 Click **Rename Photos**.

Note: Optionally, press **F2**.

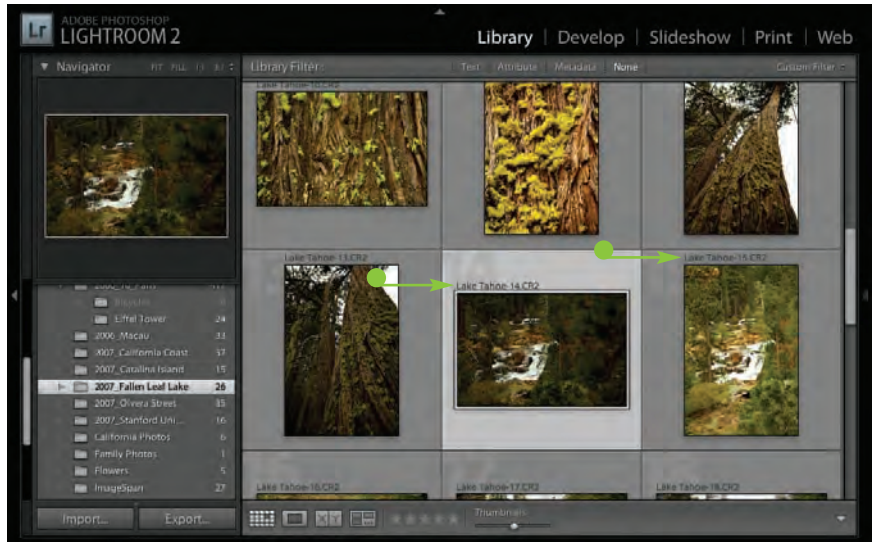


The Rename *number* Photos dialog box appears.

- 5 Click the **File Naming** button.
- 6 Click a Lightroom preset or a custom preset if you created one.



- 7 Depending on the preset, you can enter custom text and/or a start number.
- 8 Click **OK**.
- The photo files are automatically and sequentially renamed.



TIPS

After deleting some photos, my sequence numbers now have gaps. Can I rename the photos with this technique?

Yes. However, be aware that if you imported photos and converted to DNG and you saved a separate set of original files, the DNG numbers will no longer match the numbers of the original files you saved. See Chapter 2 for more about DNG.



When is the best time to rename photos?

Some photographers rename on import and others once they have sorted and deleted the rejected photos. Still others rename when they export the files. (See Chapter 13 for more about exporting.) However you name your files, your naming system must be consistent to take advantage of Lightroom's organizational features.



Tag Your Photos for Easier Sorting

Lightroom includes three different types of rating tags you can add to help organize your photos. Some photographers only mark the good photos and others include a complete ranking system. You can tag photos in either the Grid or Loupe view with one to five stars, one to five colors, or flag them as rejected or accepted.

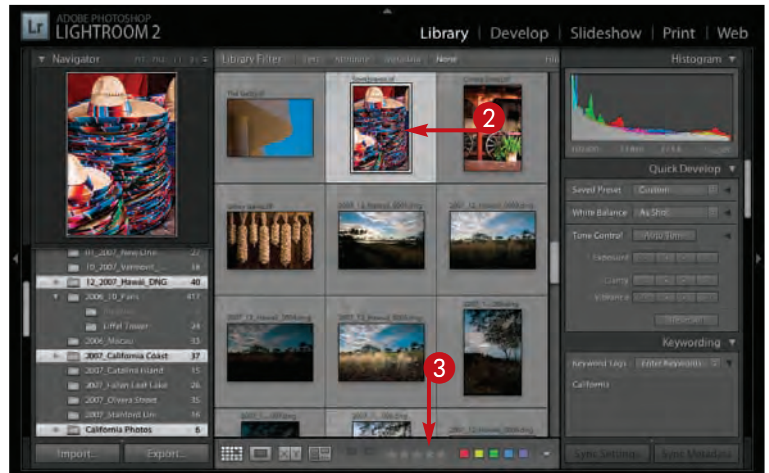


Tag Your Photos for Easier Sorting

APPLY TAGS

- 1 Open Lightroom in the Library module.
- 2 Click a photo to select it.
- 3 Click the fourth star (★) in the toolbar.

Note: Optionally, press **4** to add four stars.





- Four stars are applied to the thumbnail of the photo.
- 4 Click another photo to select it.
 - 5 Click a flag (🚩 or 🚩) in the toolbar.

Note: Optionally, press **P** for accepted or **X** for rejected.



- The accepted or rejected flag tag appears on the photo.

The photo is dimmed in the grid if the photo is tagged rejected.

- 6  +click (Ctrl)+click a number of photos to select them.
- 7 Click a color label () in the toolbar.


Note: Optionally, press **6** to add the red color label.

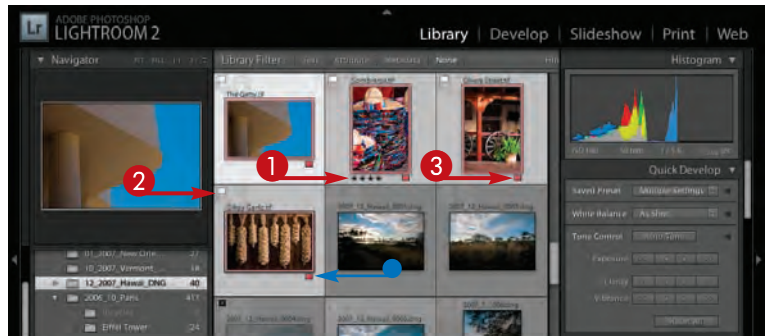
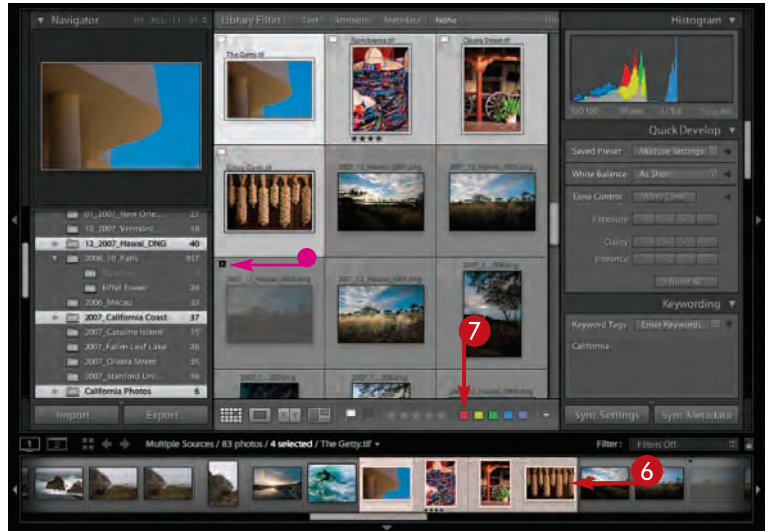
- The red color label is added to the selected photos.

Note: The borders of the thumbnails with color labels turn the color of the label if the **Tint grid cells with label colors** check box is checked in the Library View Options under Grid View.

REMOVE TAGS

- 1 Double-click the first star under the thumbnail to remove a rating.
- 2 Click the flag on the thumbnail to remove it.
- 3 Click the color label on the thumbnail and click **None** in the menu that appears.

Note: Optionally, click a thumbnail to select it and click the red label () to remove the color label.



TIP

What are the keyboard shortcuts for ratings?

Keystroke	Action
p	Accepted flag
x	Rejected flag
u	Remove flag
0	No star
1	1 Star
2	2 Star
3	3 Star
4	4 Star

Keystroke	Action
5	5 Star
[Decrease star rating
]	Increase star rating
6	Red label
7	Yellow label
8	Green label
9	Blue label

Filter Your Photos

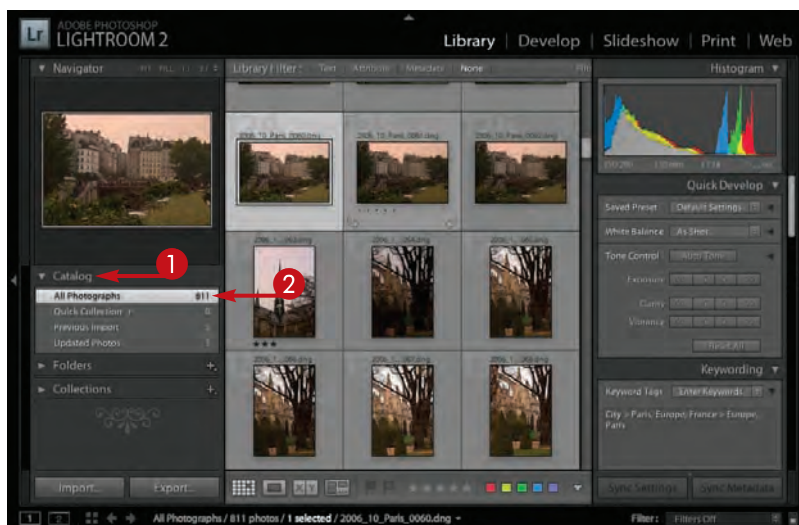
Filtering helps you find specific photos by limiting the photos in the viewing area to those that fit specific criteria. The Filter bar above the Grid view displays all the possible ways to filter your photos. The filters are additive and can be customized.

You can also access filters in the Filmstrip, which is persistent across all the modules so you can filter your photos even when developing or outputting them.



Filter Your Photos

- 1 Click **Catalog**.
- 2 Click **All Photographs**.
- 3 Press **T** to hide the toolbar.
- 4 Press **Shift + Tab**.

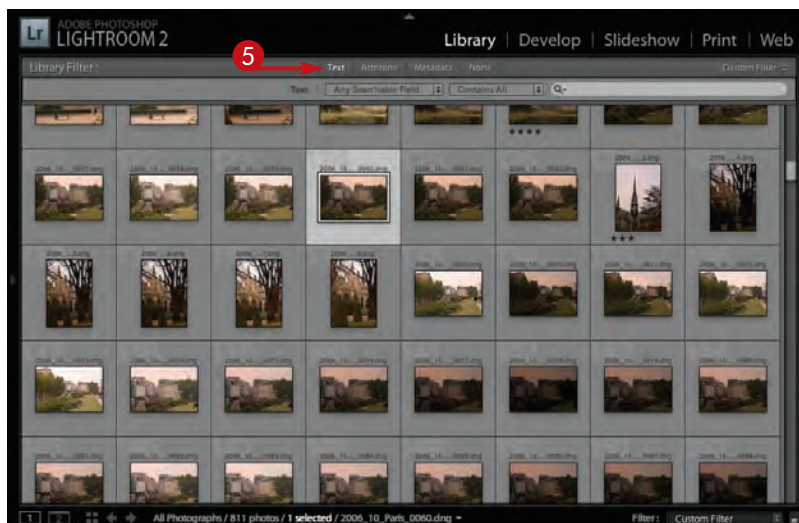


All the panels hide so you can see the full Filter bar.

Note: Optionally, click the **Any Searchable Field** or the **Contains** to restrict the search more.

- 5 Click **Text** in the Filter bar.

The Text search options bar appears.



- 6 Type a word in the text box.

The Grid view shows only the photos that match the Text criteria.

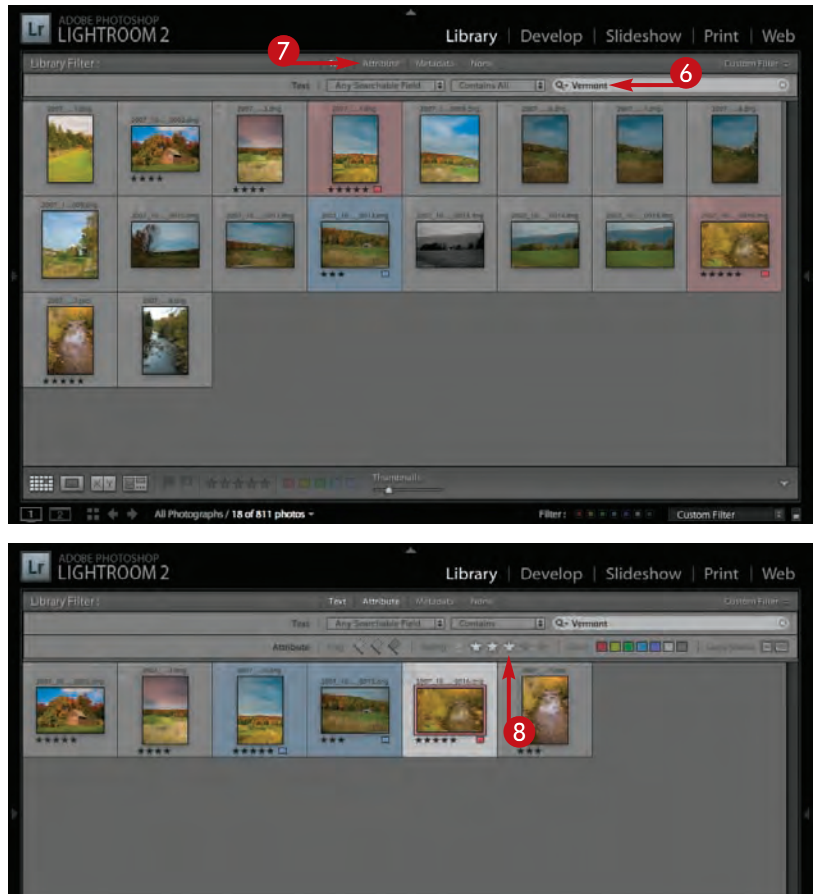
- 7 Click **Attribute**.

The Attribute search options appear.

- 8 Click any of the Attribute options to apply them.


Note: Optionally, click **Metadata** and select any metadata options for filtering the photos.

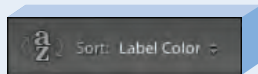
The Grid view displays only the photos that meet all the criteria set in the Filter bar.




TIPS

Can I sort my photos and still see all of them in the Grid view?

Yes. You can sort your photos in the grid by name, applied rating or flag, or by capture time or a number of other sorting options. Add the Sort tool to the toolbar as described in the “Customize the Library Toolbar” task, and then click  to select the sort order.



Are there any other keyboard shortcuts for either filtering or tagging photos?

Yes. Press **1** to toggle the top Filter bar on and off. When you use the keyboard shortcuts, pressing **1** to **5** for star ratings or **6** to **9** for color labels, you can press and hold **Shift** to advance the photos automatically as you apply the rating or color, or click  to automatically advance each photo after rating or labeling.



Organize Your Photos with Folders

Folders are Lightroom's first level of organization. You can create new folders and subfolders, rename folders, and move images between folders in Lightroom to get your photos organized. When you create folders or move images between folders using Lightroom, the same changes automatically appear in the folder hierarchy on the photo storage drive.



Organize Your Photos with Folders

CREATE A SUBFOLDER

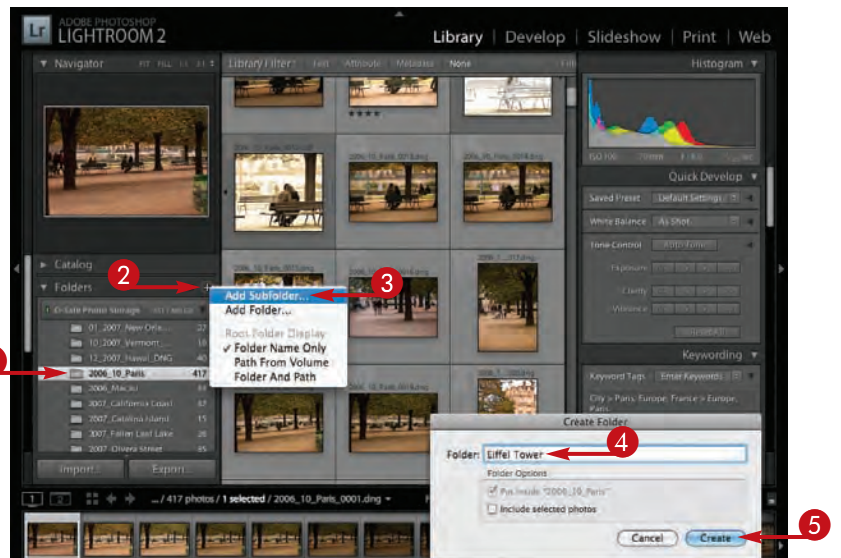
- 1 In the Folders section of the Library module, click the name of a folder.
- 2 Click the plus sign (+).
- 3 Click **Add Subfolder** in the menu.

A Create Folder dialog box appears.

- 4 Type the name for the subfolder in the text box.

Note: Optionally, if you had already selected the photos to use in the subfolder, click **Include selected photos** (☐ changes to ☑).

- 5 Click **Create**.

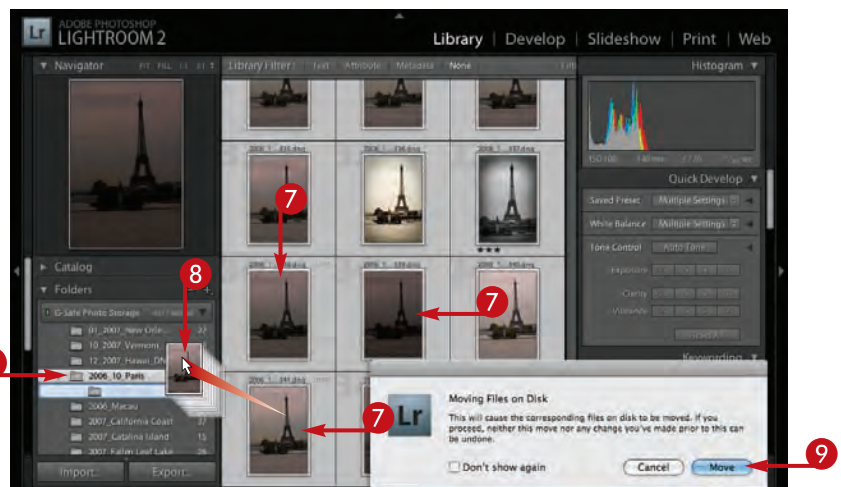


The subfolder is listed under the previously selected folder.

- 6 Click the parent folder to view the photos in the grid.
- 7 ⌘+click (Ctrl+click) or Shift+click the photos to move to the subfolder.
- 8 Click and drag the selected folders to the subfolder.

Note: Click directly on a photo and not the frame to click and drag a group of photos into the subfolder.

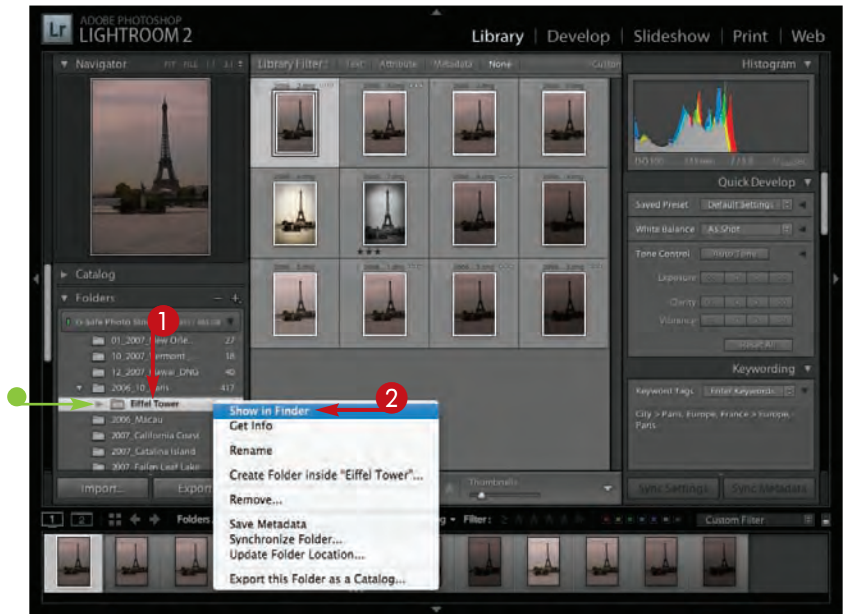
- 9 Click **Move** in the warning dialog box that appears.



- The photos are shown in the subfolder.

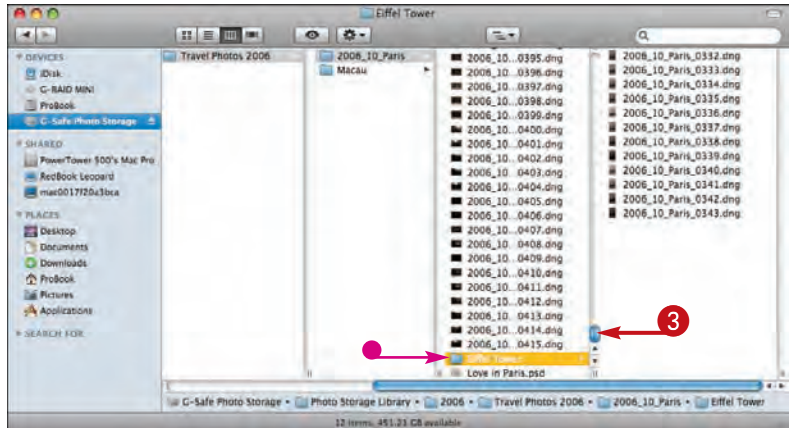
VIEW THE SUBFOLDER ON THE STORAGE DRIVE

- 1 **Control**+click (right-click) the subfolder.
- 2 Click **Show in Finder** (Show in Explorer).



- The Finder (Explorer) window appears showing the location of the parent folder.

- 3 Scroll down if necessary to see the new subfolder inside the parent folder.



TIPS

How do I rename a subfolder?

To rename a subfolder, double-click the folder name, type the new name in the text box, and press **Return** (**Enter**). You can also **⌘**+click (**Ctrl**+click) the folder and click

Rename. Type the new name in the Rename Folder dialog box that appears and click **Save**.



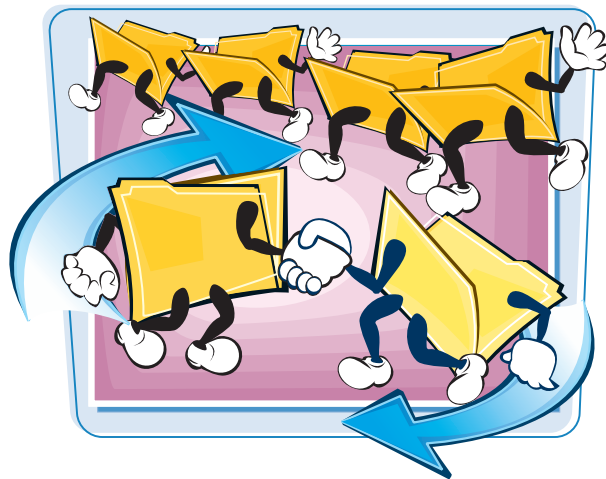
How do I delete a folder?

If the folder has no images in it, you can delete the folder by clicking the folder to select it and clicking the minus sign (⊖). If the folder contains photos, a warning box appears saying the photos will be removed from Lightroom's catalog but both the folder and photos will remain in the storage location.



Synchronize Folders That Have Changed

Moving images between folders or creating subfolders in Lightroom automatically changes the folder structure on your hard drive. However, if you make changes to a folder on your hard drive — for example, if you drag-copy files from a memory card directly to a folder on your system, or even create a subfolder on the hard drive — you must synchronize the folder to bring the photos into Lightroom’s catalog.

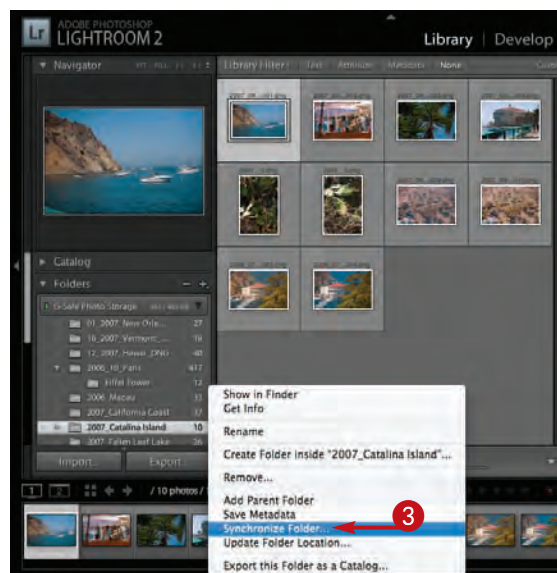


Synchronize Folders That Have Changed

- 1 In the Folders section of the Library module, click the name of a folder you added images to directly on the hard drive.
- 2 **Control**+click (right-click) the folder name.

A menu appears.

- 3 Click **Synchronize Folder**.





The Synchronize Folder dialog box appears with the name of the folder in quotation marks.

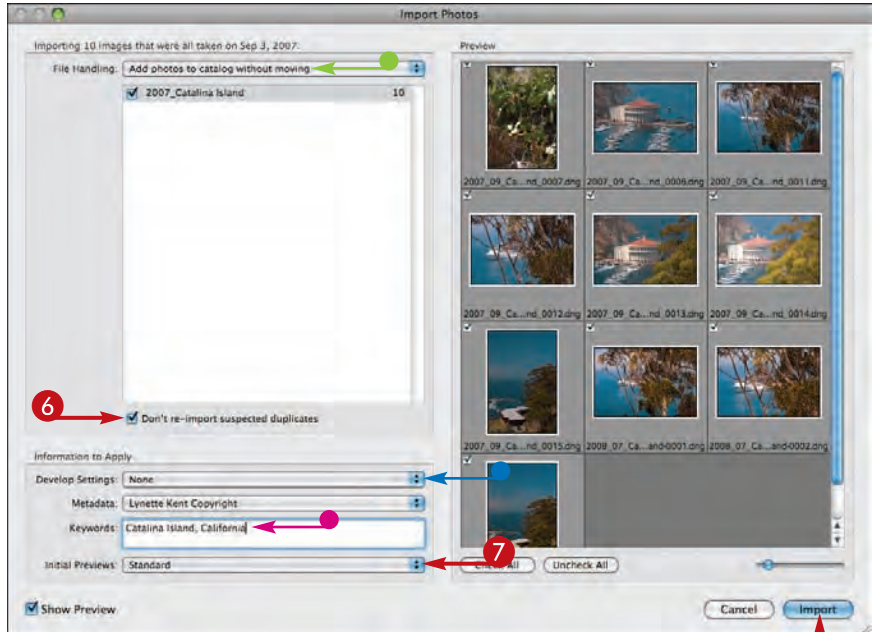
- 4 Click **Show import dialog before importing** (☐ changes to ☒) if it is not already selected.

- 5 Click **Synchronize**.

The Import Photos dialog box appears.

- The File Handling is automatically set to **Add photos to catalog without moving** and the folder is highlighted in the box.
 - You can add keywords in the text box.
- 6 Click **Don't re-import suspected duplicates** (☐ changes to ☒) if it is not already selected.
- You can click the **Develop Settings**  to add settings to all the imported images.
- 7 Click the **Initial Previews**  to change the Preview size.
- 8 Click **Import**.

The photos are imported and added to the selected folder.



TIPS

Is there another way to access the Synchronize Folder command?

Yes. First select the folder. In the menu bar, click **Library** and click **Synchronize Folder**. Then follow Steps 4 to 8 as in the task.

Do I have to start over and re-import some photos I accidentally removed from a folder?

No. As long as you did not delete the photos from the hard drive, the photo files are still in the folder structure on your system or hard drive. You can quickly bring them back by using the Synchronize Folder command as in the task.



Group Your Photos into Collections

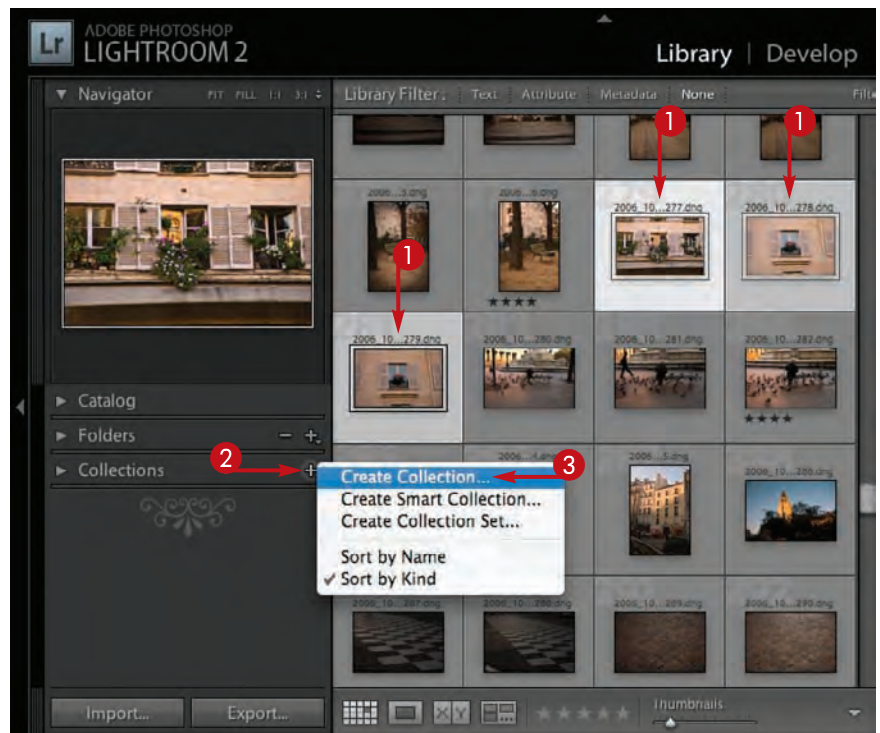
Lightroom's collections are a powerful way of organizing photos regardless of where they are on your hard drive or the folder in which they reside. Lightroom offers several ways of working with collections. You can have named collections or Smart Collections, or group multiple collections in Collection Sets. Collections are an extremely flexible method of organizing your photos in Lightroom.



Group Your Photos into Collections

CREATE A COLLECTION OF PHOTOS

- 1 +click (**Ctrl**+click) multiple photos to group into a collection.
- 2 Click the **Collections** .
- 3 Click **Create Collection**.



The Create Collection dialog box appears.

- 4 Type a name for the collection in the text box.
- 5 Click **Create**.



- A collection is created with the selected photos and appears in the Collection section.

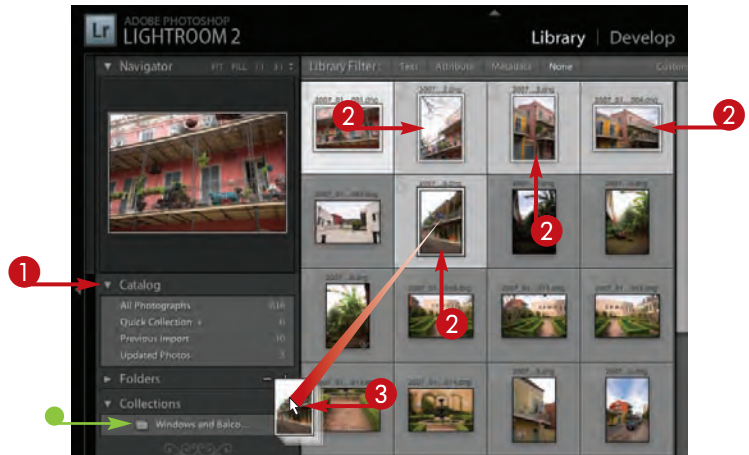
ADD TO AN EXISTING COLLECTION

- 1 Click the **Catalog** ▶ to view all the photos in the grid.

Note: Optionally, click the **Folders** ▶ and click a specific folder to view only those photos in the grid.

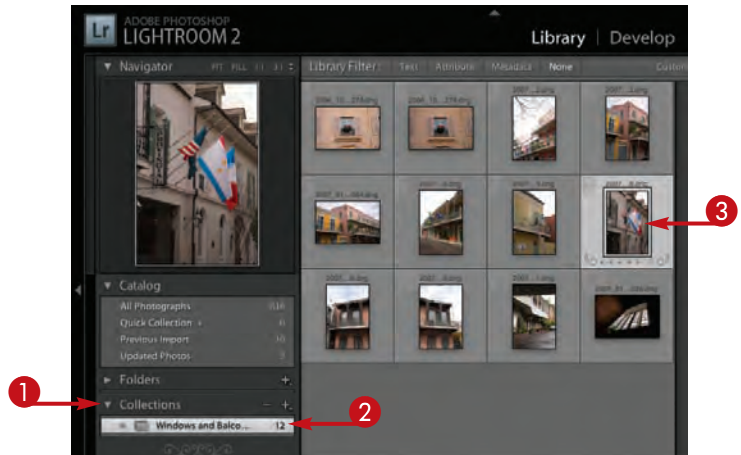
- 2 ⌘+click (Ctrl+click) more photos to add to the collection.
- 3 Click and drag the selected photos to the newly created collection.

The selected photos are added to the collection.



REMOVE A PHOTO FROM AN EXISTING COLLECTION

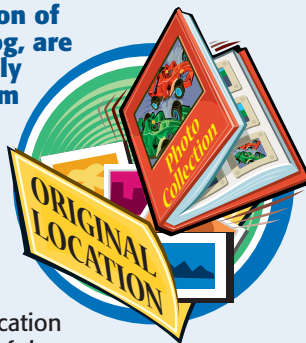
- 1 Click the **Collections** ▶.
- 2 Click the name of the collection to view only those photos in the grid.
- 3 Click a photo to select it.
- 4 Press **Delete** (Backspace) to remove the photo from the collection.



TIPS

If I create a collection of photos in my catalog, are the photos physically moved on my system or hard drive as with folders?

No. Unlike folders, collections keep a reference or a pointer only to the actual photo file. The photos remain in the same location and folder regardless of the collection in which they are included.



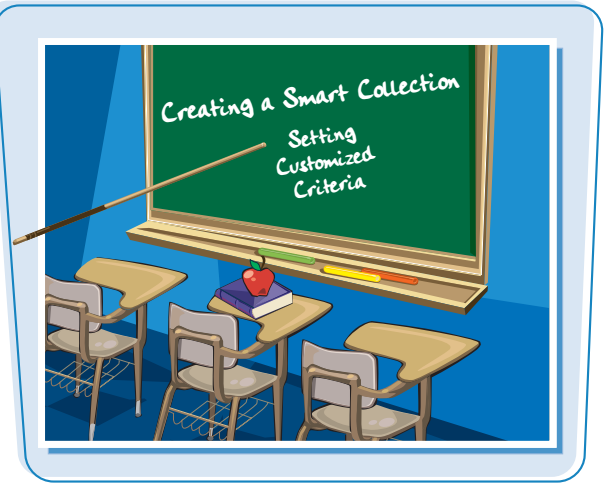
Can photos be in multiple collections at one time?

Yes. You can have a collection of photos with balconies from Paris and New Orleans and another collection with street scenes of Paris. The photos of the Paris balconies can be in both collections, and no files are duplicated on the hard drive.



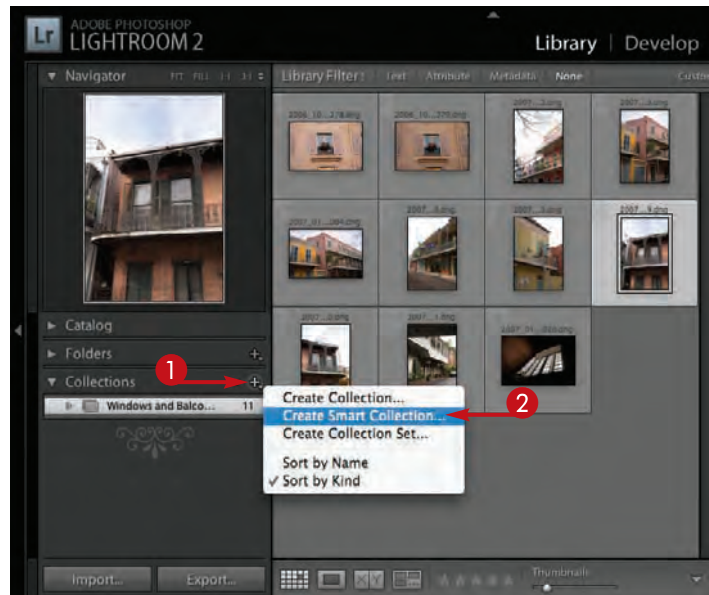
Create a Smart Collection

In version 2, Lightroom added Smart Collections for refining and sorting images. A Smart Collection monitors all the photos in your Lightroom catalog and adds photos to the collection based on the customized criteria you set. You can create a Smart Collection to help you keep your photo catalog organized.



Create a Smart Collection


- 1 Click the **Collections** .
- 2 Click **Create Smart Collection**.




A Create Smart Collection dialog box appears.

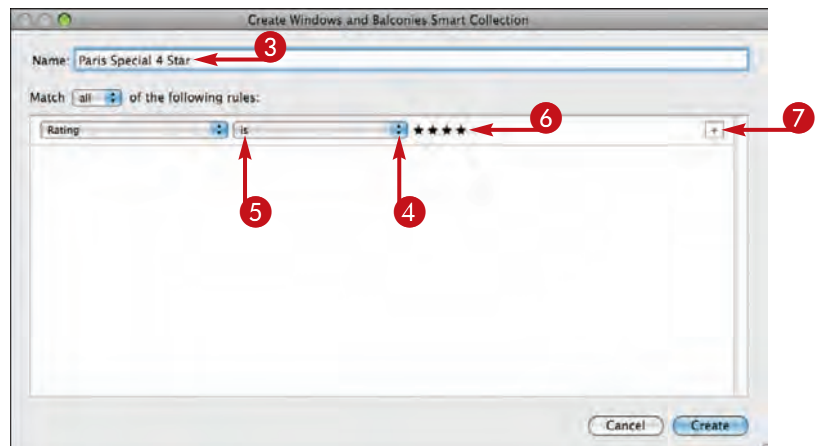
- 3 Type a name in the text box.

Note: You can use any one or multiple parameters for a Smart Collection.


- 4 Click .
- 5 Click **is**.
- 6 Click the fourth dot.

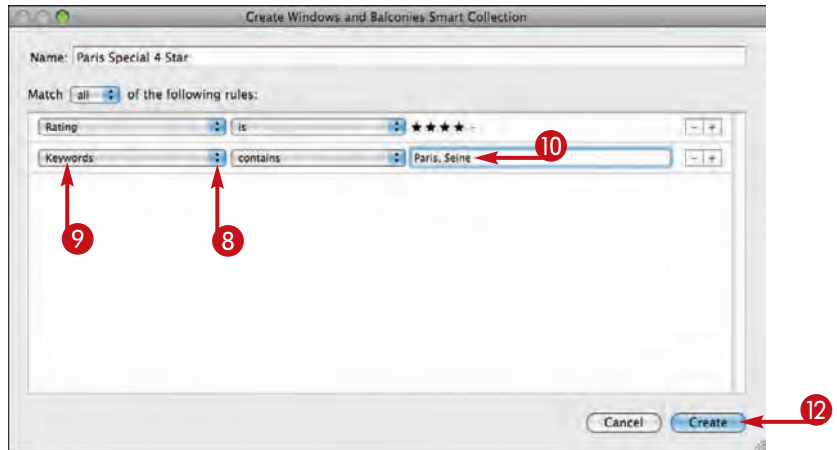
The dots change to stars.

- 7 Click the plus sign (.

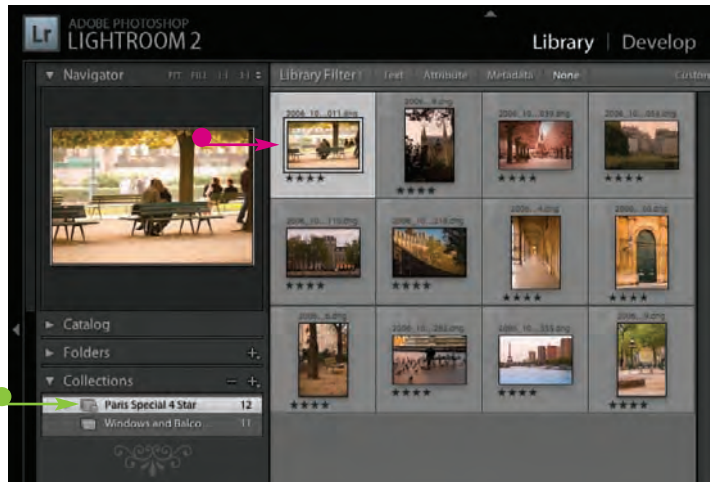


Another set of parameter options appear.

- 8 Click the second .
- 9 Click **Keywords**.
- 10 Type some keywords in the text box.
- 11 Repeat Steps 7 and 8 to add more specific parameters.
- 12 Click **Create**.



- A Smart Collection appears in the Collections section.
- All the photos in the catalog that match the criteria are displayed in the grid.



TIPS

Why did one of my photos disappear from the Smart Collection when I changed the photo's rating?

Smart Collections are interactive and change when you change the parameters of the included photos. For example, if you set a rating of five stars for a Smart Collection and then reduce a particular photo's rating from five to three stars, the photo is automatically removed from the Smart Collection.



Can I rename a Smart Collection without affecting the photos in it?

Yes. You can rename a Smart Collection by **Control**+clicking (right-clicking) the Smart Collection's name. Click **Rename** in the list of options. Type a name in the text box of the Rename Smart Collection dialog box that appears and click **Rename**. The Smart Collection is renamed and the collection is left intact.




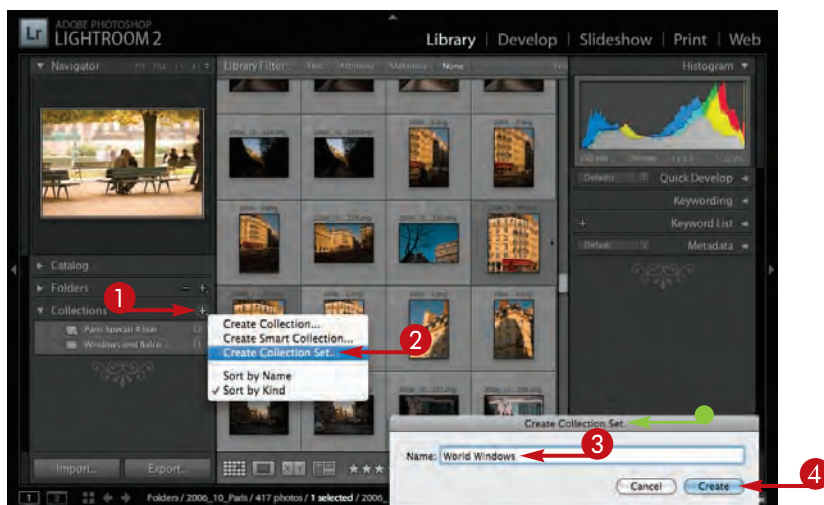
Group Collections into a Collection Set

Using Collection Sets is a powerful and systematic way to organize your images. You can create customized sets to group similar or related collections. You can also create the sets and the included collections first and then drag-copy photos into them. Because collections are visible in all the output modules — Print, Slide Show, and Web — you can group photos you want to work with for each module.





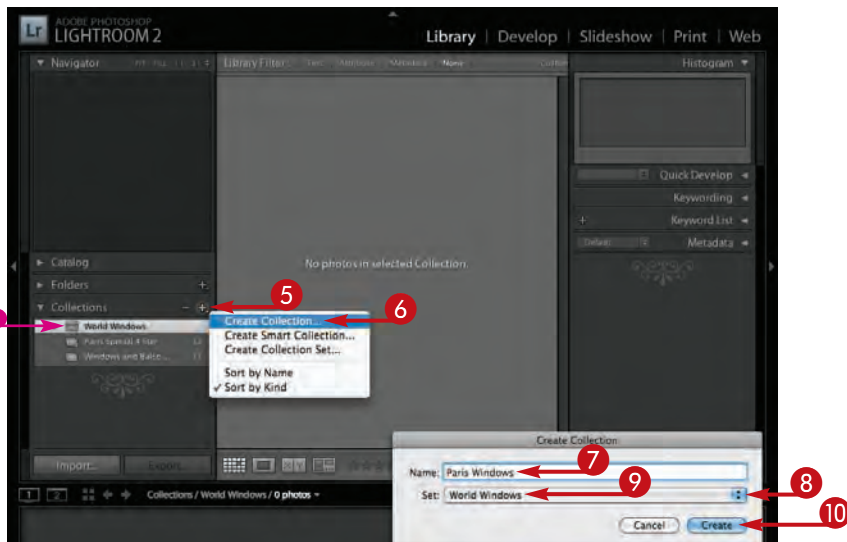
Group Collections into a Collection Set

- 1 Click the **Collections** .
- 2 Click **Create Collection Set**.
 - A Create Collection Set dialog box appears.
- 3 Type a name for the Collection Set.
- 4 Click **Create**.

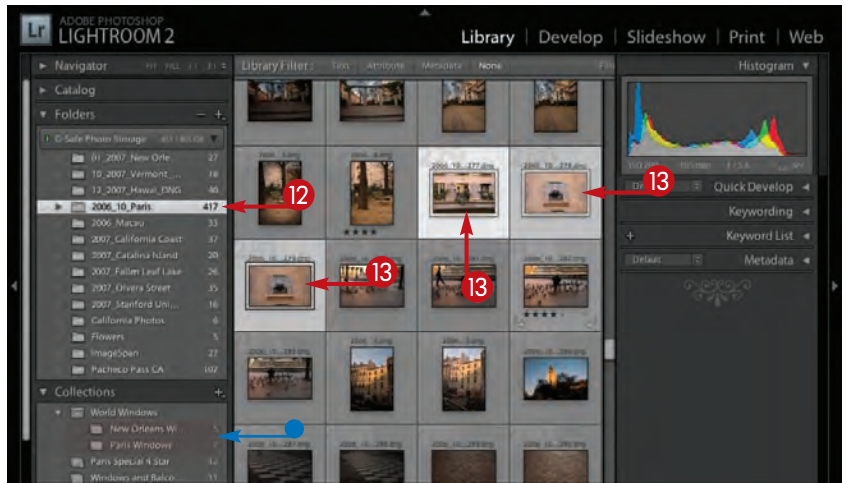


- A new folder with the Collection Set name appears in the Collections section.

- 5 Click the **Collections** .
- 6 Click **Create Collection**.
- 7 Type a name for the collection in the text box that appears.
- 8 Click the **Set** .
- 9 Click the name of the Collection Set to store the new collection.
- 10 Click **Create**.
- 11 Repeat Steps 5 to 9 to create multiple collections in a Collection Set.



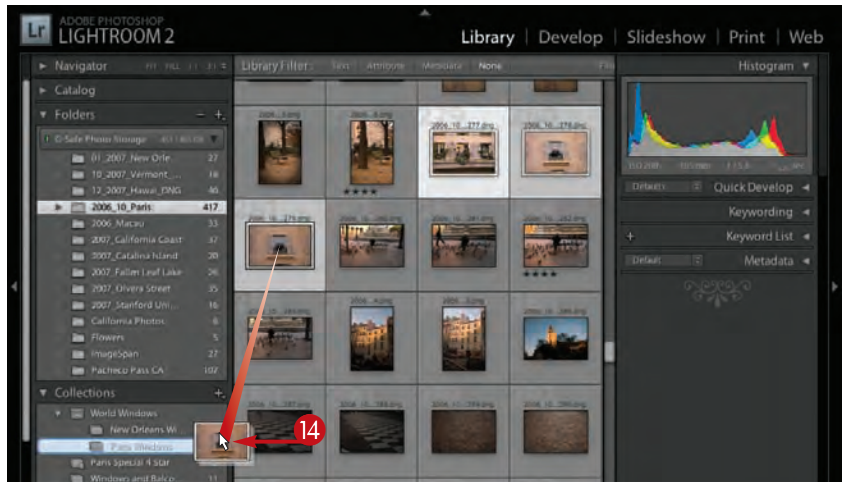
- The new collections are named and placed in the appropriate Collection Set.
- 12 Click any folder in the Folders section.
- 13 ⌘+click (Ctrl+click) any images to be put into a collection.



- 14 Click and drag the images to a collection inside the Collection Set.

Note: You can also create collections by first selecting photos as the task “Group Your Photos into Collections” and then dragging the collection into the Collection Set.

The grouped photos are now visible in the grid as grouped in each collection.



TIPS

Can I view the contents of several collections at one time?

Yes. Like folders you can ⌘+click (Ctrl+click) multiple collections to view the combined images in the grid. You can also view the contents of a complete Collection Set at one time by clicking the set's name.



Can I move a collection from one Collection Set to another?

Yes. You can click and drag collections from one set into another in the Collections section of the left Library module panel. You can also click and drag photo files from one collection to another, which shows the photo thumbnail in both collections without having to duplicate the photo file.



Make a Quick Collection

A Quick Collection is a quick way to temporarily group photos as you make decisions. Lightroom's Quick Collection feature is under the Catalog section instead of the Collections section because you do not name or save a Quick Collection and you can have only one Quick Collection at a time. You make the Quick Collection from the Grid view in the Library module.



Make a Quick Collection

USE THE QUICK COLLECTION CIRCLES TO ADD QUICK COLLECTION

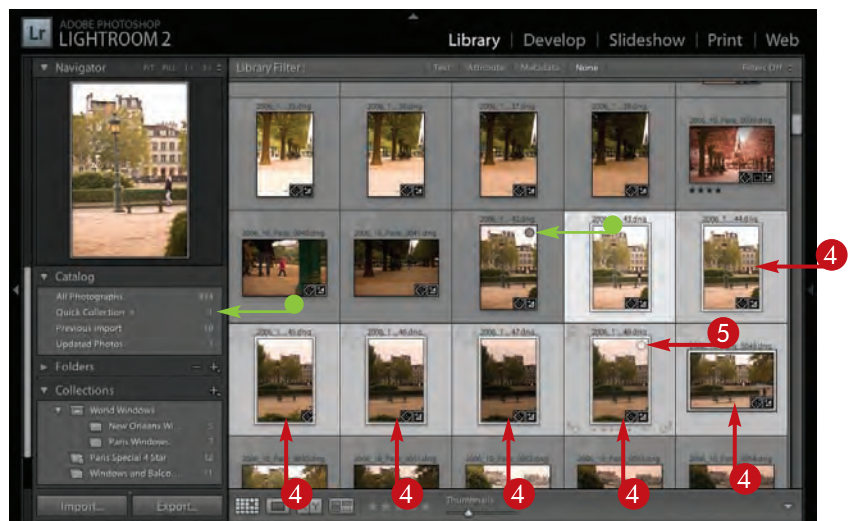
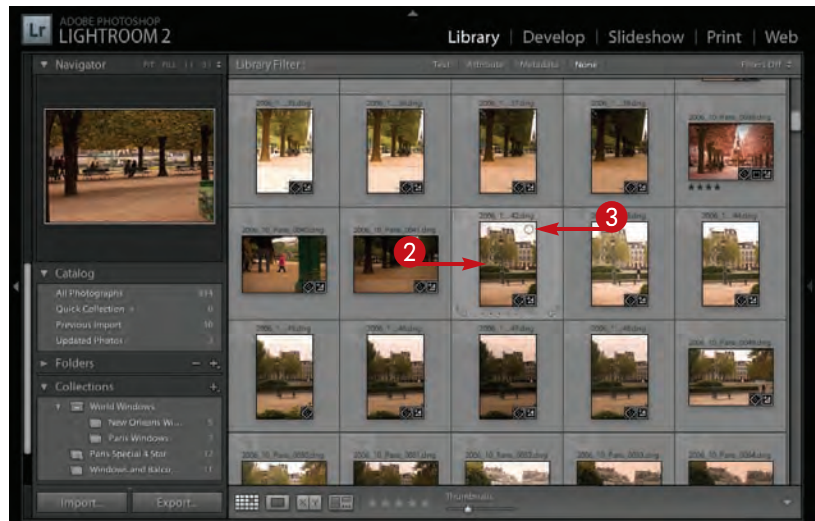
- 1 Open the Catalog or any individual folders in the Grid view.

Note: Optionally, press **F8** to hide the right panel.

- 2 Position the cursor over a photo to add to a Quick Collection.
- 3 Click the Quick Collection circle (○) that appears as the cursor moves over the photo.

- The photo is automatically added to the Quick Collection and ○ turns gray.

- 4 ⌘+click (Ctrl+click) multiple photos to add to the Quick Collection.
- 5 Click ○ on one of the selected photos.



- All the selected photos are added to the Quick Collection.

USE A KEYSTROKE TO ADD PHOTOS TO ADD QUICK COLLECTION

- 1 Click a photo to select it or +click (**Ctrl**)+click other photos to add to the Quick Collection.
- 2 Press **B**.



- All the selected photos are added to the Quick Collection.
- 3 Click the Quick Collection to view only the included photos.



TIPS

Why do I not see the Quick Collection circle as I position the mouse over my photos in the Grid?

Click **View** in the menu bar, click **Grid View Style**, and click **Show Badges**. The Show Badges option must be checked for the Quick Collection circle to appear.



If a Quick Collection is temporary, what happens to the Quick Collection when I quit Lightroom?

A Quick Collection remains available even after quitting and restarting Lightroom.



Convert a Quick Collection to a Permanent Collection

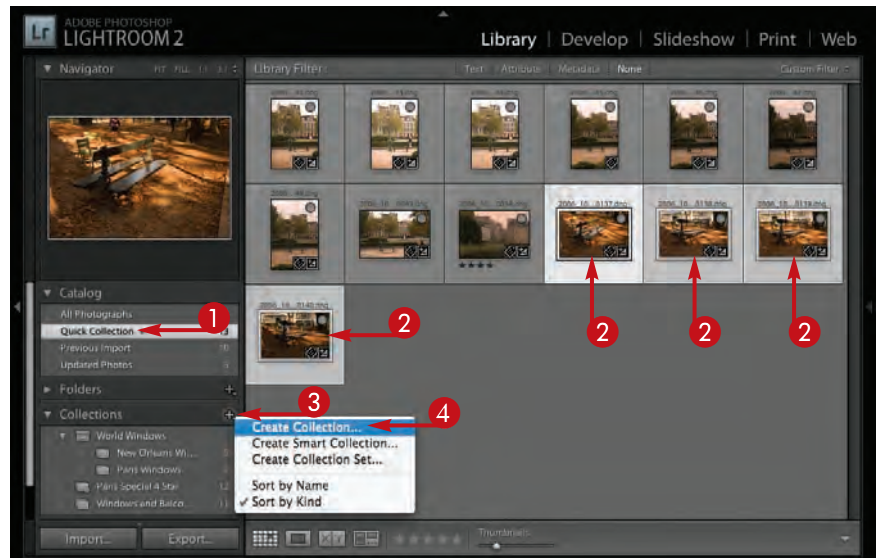
You can use the Quick Collection to gather photos from any of your folders, and add or delete images from the Quick Collection to finalize a grouping. You can then convert one or all the photos in a Quick Collection into a permanent named collection to create a more organized and usable catalog.



Convert a Quick Collection to a Permanent Collection

CONVERT SOME PHOTOS FROM A QUICK COLLECTION TO A PERMANENT COLLECTION

- 1 Click the Quick Collection in the Catalog section.
- 2 ⌘+click (Ctrl+click) any photos to use in a new named collection.
- 3 Click the **Collections** +.
- 4 Click **Create Collection**.



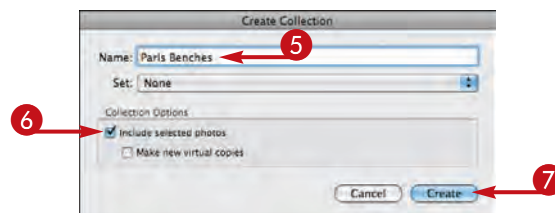
The Create Collection dialog box appears.

- 5 Type a name for the new collection in the text box.

Note: Optionally, click the **Set** ▾ to put the new collection in an existing set.

- 6 Click **Include selected photos** (☐ changes to ☑).

- 7 Click **Create**.



The selected photos are added to the new collection.

CONVERT AN ENTIRE QUICK COLLECTION TO A PERMANENT COLLECTION

1 **Control**+click (right-click) **Quick Collection** in the Catalog section.

2 Click **Save Quick Collection**.

The Save Quick Collection dialog box appears.

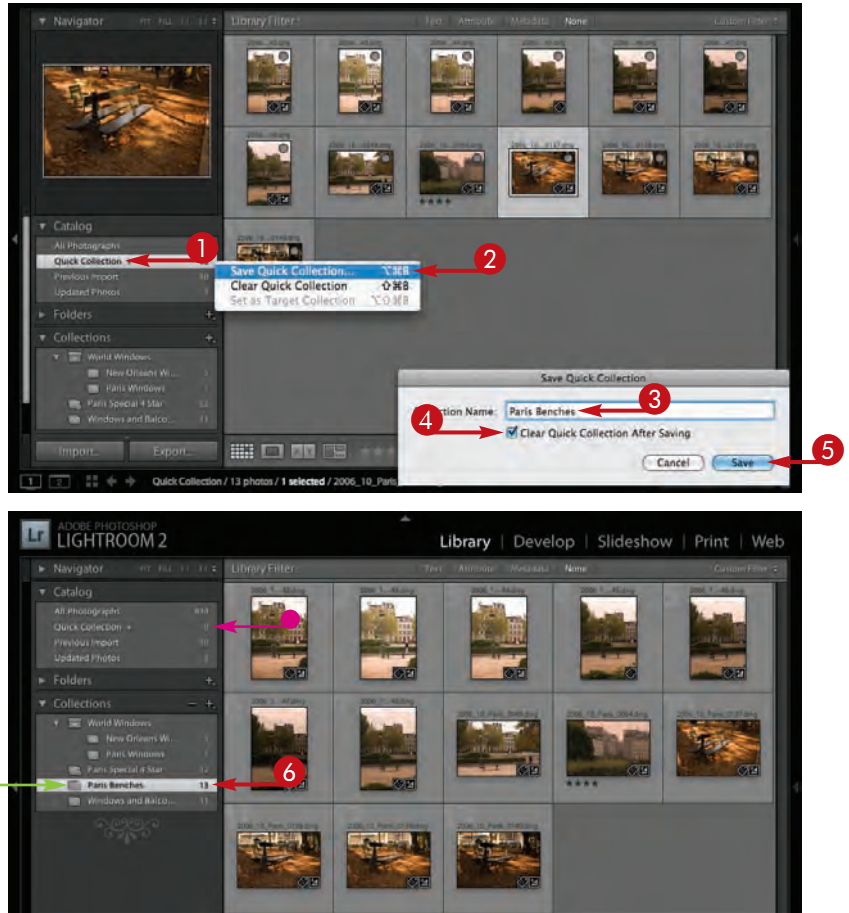
3 Type a name for the new named collection.

4 Click **Clear Quick Collection After Saving** (☐ changes to ☒) if it is not already checked.

5 Click **Save**.

- The Quick Collection is converted to a named collection.
- The photos are removed from the Quick Collection.

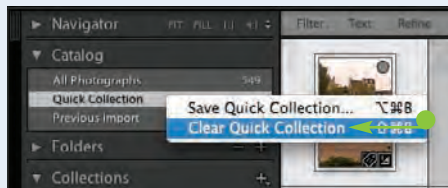
6 Click the new named collection to view the photos in the grid.



TIPS

How do I remove the photos in the Quick Collection?

You can delete one photo at a time from a Quick Collection by clicking the . You can also **Control**+click (right-click) one or multiple selected photos in the Quick Collection and click **Remove from Quick Collection**. To remove all the photos at once, you can **Control**+click (right-click) the words **Quick Collection** in the Catalog section and click **Clear Quick Collection** (●) from the menu that appears.

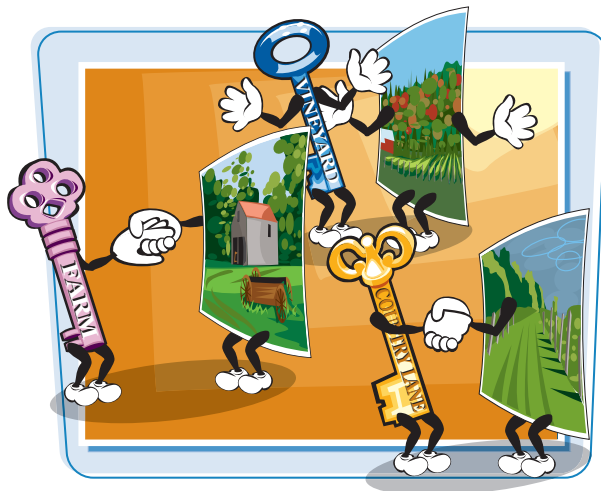


Are the files duplicated when I convert but do not clear a Quick Collection?

No. Collections only make references to the photo files. They never move any files from their current locations. Even if you do not clear the Quick Collection when converting it and the photos appear both in the Quick and named Collection, there is no duplication of the files.



Add Keywords to Your Photos

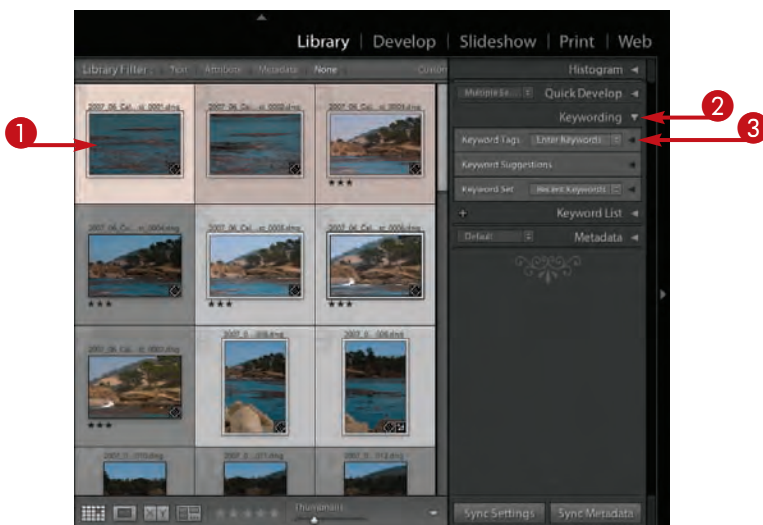
On the right panel in the Library module are two sections relating to keywords. *Keywords* are words or phrases that relate to the content of the photo. You can add keywords for sorting and organizing to make finding specific photos easy even as your catalog of images increases in size.



Add Keywords to Your Photos

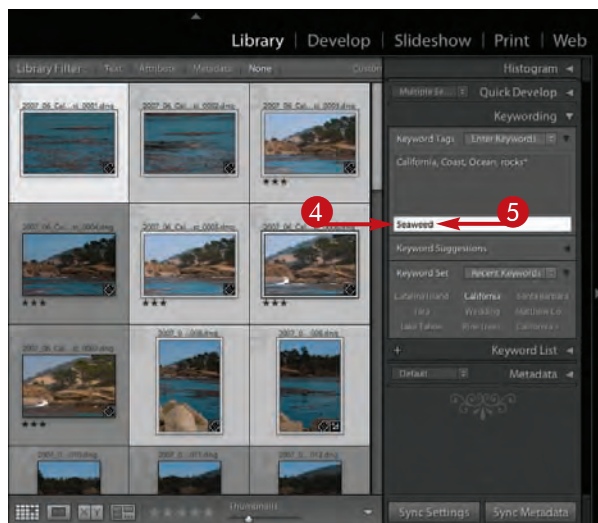
ADD A NEW KEYWORD TO ONE OR MULTIPLE PHOTOS

- 1 Click one thumbnail or **⌘**+click (**Ctrl**+click) multiple thumbnails in the grid.
- 2 Click the **Keywording** .
- 3 Click  to open the Keyword Tags section.




The keywords currently assigned to the thumbnails are listed in the Keywording pane.

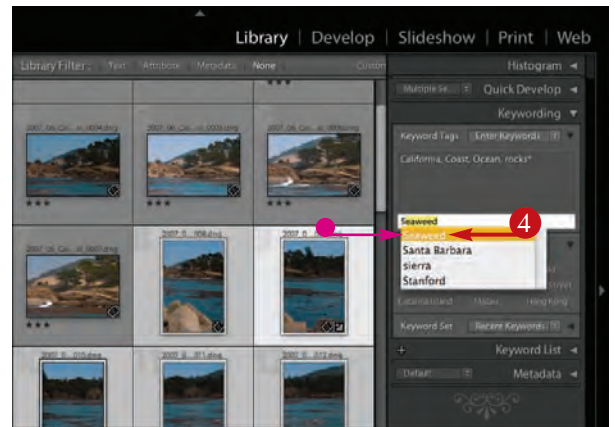
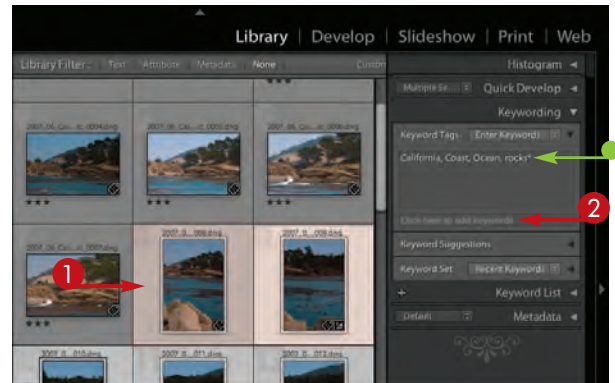
- 4 Click here to add a new keyword.
- 5 Type a new keyword in the text field that appears.
- 6 Press **Return** (**Enter**) to apply the keyword to the selected photos.



ADD AN EXISTING KEYWORD TO ONE OR MULTIPLE PHOTOS

- 1 Click a thumbnail or +click (**Ctrl**+click) multiple photos in the grid.
- The existing keywords appear in the Keywording pane.
- 2 Click in the text box.
- 3 Start typing a keyword.
- A list of previously added keywords appears.
- 4 Click a word to select it.
- 5 Press **Return** (**Enter**) to apply that keyword to all the selected photos.

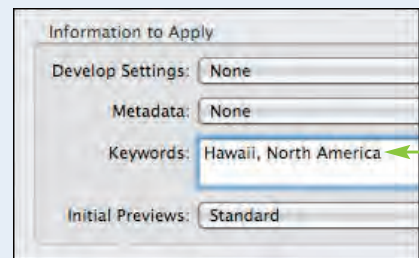
Note: Optionally, click the **Keyword Suggestions**  to view a list of keywords already used in your catalog of photos, and click to select one or more.

**TIPS****Why is there an asterisk in the Keyword pane after one of the keywords?**

If you select multiple thumbnails and some have different keywords assigned, the keywords that apply to some but not all of the photos display an asterisk. You can reassign a keyword with an asterisk to the entire group of selected photos by deleting the asterisk in the text in the Keyword pane.

I added keywords as I imported photos. Why should I add more keywords?

The keywords you added upon import (●) have to be general and relate to all the photos in the import group. By adding more specific keywords to target certain images, you will be able to sort your photos far more efficiently with Lightroom's filters and find specific photos much more quickly.




Add Keywords with the Painter Tool

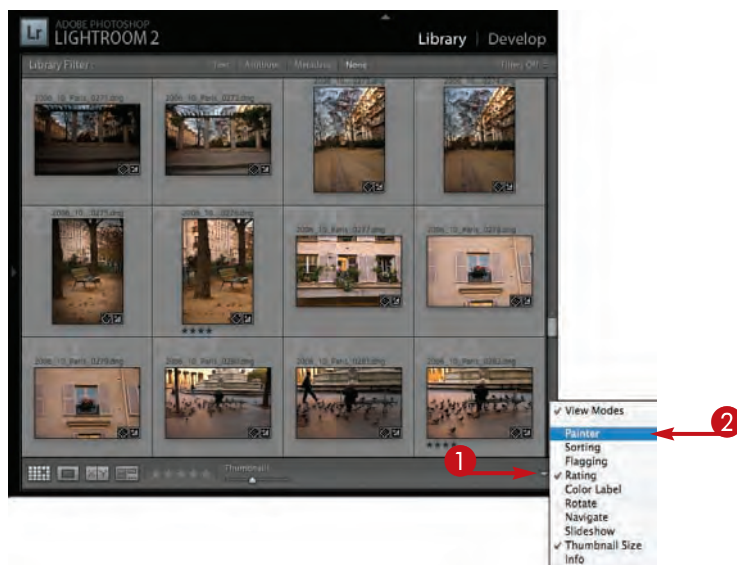
You can quickly apply one or more keywords to photos using the Painter tool found in the toolbar. You can click the Painter tool on any thumbnails in the grid, and the keyword or words you select are quickly assigned. You can also erase keywords using the Painter tool just as easily.



Add Keywords with the Painter Tool

Note: Optionally, press **F7** to hide the left panel.

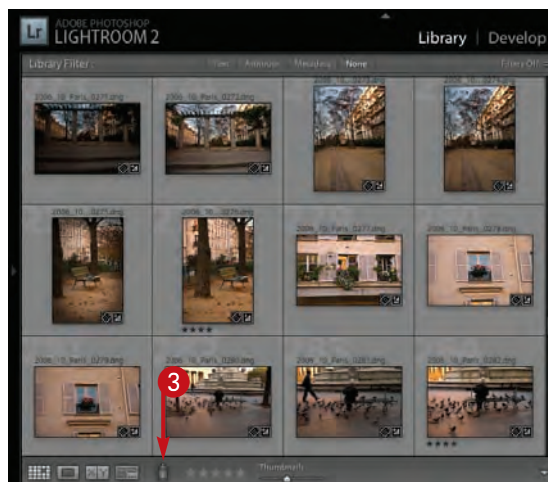
- 1 Click  in the toolbar.
- 2 Click **Painter** in the list that appears.



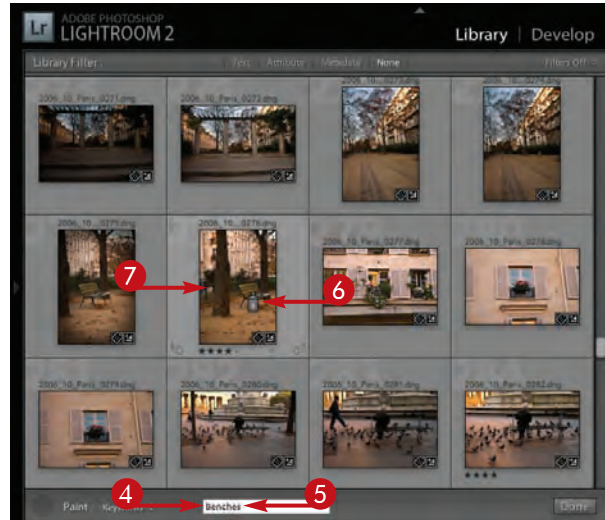
The Painter tool appears in the toolbar.

- 3 Click the **Painter** tool ().

Note: The Painter tool floats and becomes the cursor when you position it over thumbnails.



- 4 Click in the toolbar text field that appears.
 - 5 Type one keyword in the text field.
- Note:** Optionally, type more keywords separated by commas.
- 6 Move the Painter Tool cursor (■) over the grid.
 - 7 Click the thumbnail to assign the keyword.
 - 8 Repeat Steps 6 and 7 to assign the same keywords to other thumbnails.



- Each time you click, text appears telling you the keyword was assigned.
- 9 Click **Done** in the toolbar to return the Painter tool and stop applying the keyword.
- You can also click in the circle (●) on the toolbar to return the Painter tool.



TIPS

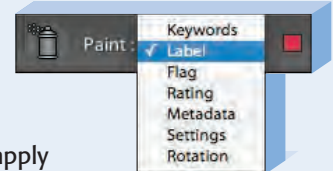
The Painter icon changed after I applied it to a thumbnail. What does that mean?

After assigning the keyword, the Painter icon changes to an eraser (■). The cursor appears as ■ over any thumbnail without that keyword and as ■ over any thumbnail with that keyword assigned. Click any thumbnail using the eraser (■) to remove the keyword.



Can the Painter tool be used to apply other attributes?

Yes. You can apply keywords as well as other criteria using the Painter tool. Click the **Painter** tool (■). **Keywords** appears as the Painter selection in the toolbar. Click ■. Click another option in the list that appears.





Create Custom Keyword Sets and Hierarchical Lists

You can group your keywords in customized keyword sets and also in a hierarchical list. Lightroom includes some general keyword sets to get you started. You can customize these or create your own sets and save them. You can assign keywords as a set and by dragging and dropping the thumbnails on a word or set in the keyword list.




Create Custom Keyword Sets and Hierarchical Lists

CREATE CUSTOM KEYWORD SETS

- 1 Click the **Keyword Set** .
- 2 Click .
- 3 Click **Edit Set**.

The Edit Keyword Set dialog box appears with previously used keywords.

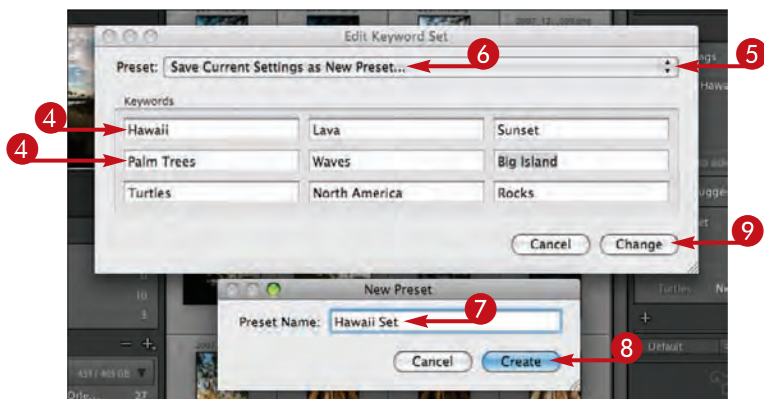
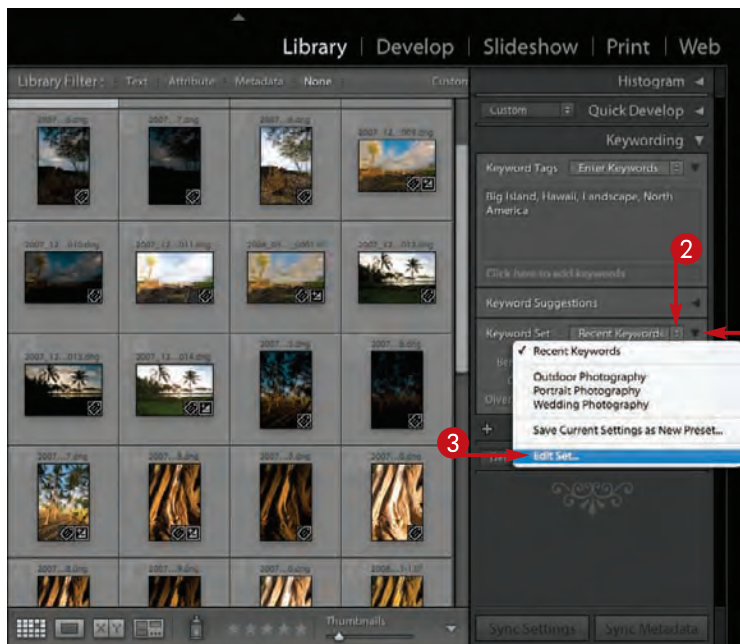
- 4 Type keywords to use in a custom set.
- 5 Click the **Preset** .
- 6 Click **Save Current Settings as New Preset**.
- 7 Type a name in the New Preset text box that appears.

- 8 Click **Create**.

The Preset name changes in the Edit Keyword Set dialog box.


- 9 Click **Change** to save the new keyword set.

The new set is listed in the Keyword Set list.



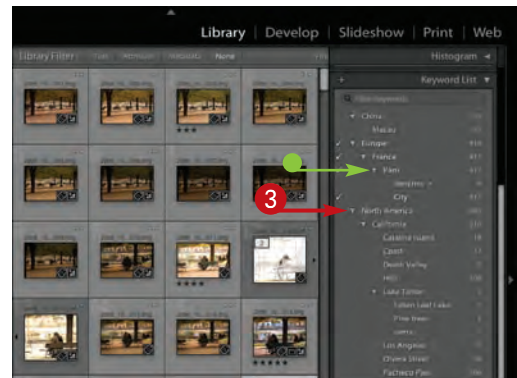
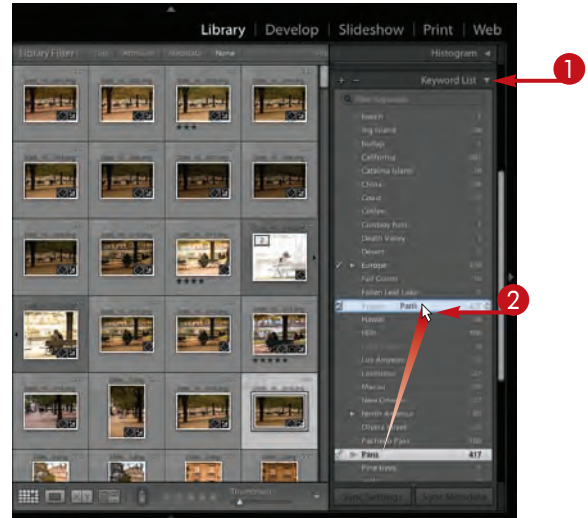
ORGANIZE YOUR KEYWORDS IN A HIERARCHICAL LIST

Note: Optionally, press **F6** to hide the Filmstrip and **F** twice to go to Full Screen view mode.

- 1 Click the **Keyword List**  to open the keyword list.
- 2 Click and drag a keyword to another keyword to act as a parent keyword.

The parent keyword is highlighted.

- The keyword is grouped hierarchically under the parent keyword.
- 3 Repeat Step 2 to create a more concise hierarchical keyword list.



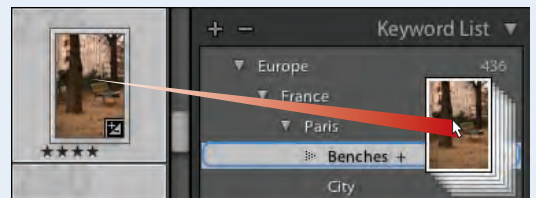
TIPS

How does Lightroom suggest keywords?

Lightroom lists the keywords you assign and suggests keywords applied to other photos having close capture times or the same keyword already assigned to them. For example, if you assign the keyword *city* to several photos that also have the keyword *benches* applied to them, when you apply *city* to another thumbnail, Lightroom may also suggest *benches*.

Is there a fast way to assign keywords to a group of thumbnails?

Yes. You can **⌘**+click (or **Ctrl**+click) any number of thumbnails in the grid and drag the thumbnails as a group over a keyword in the list. You can also click the keyword and drag it over one of the selected thumbnails to assign the keyword to all the selected photos. You can even apply multiple words at once by dragging the lowest word in the hierarchy that you want to assign.



Create an Image Stack

Image stacks are useful for organizing photos that are similar in content or shot around the same time. By stacking two or more photos, you can streamline the grid and also view more images at one time. Stacking is also convenient when you shoot multiple photos for merging to HDR or creating a panorama in Photoshop.

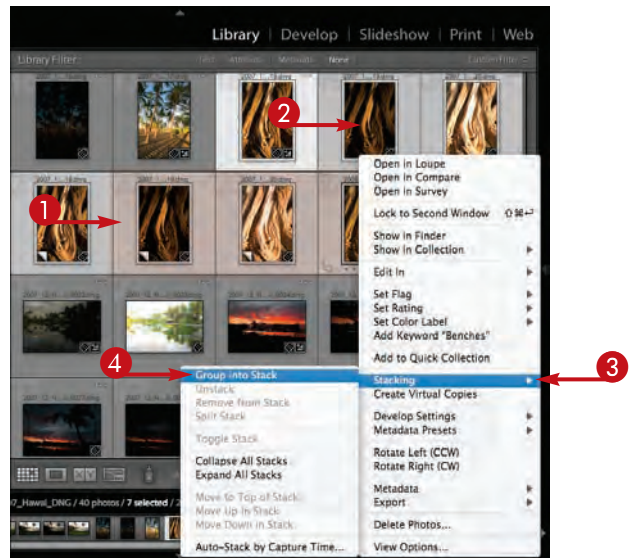


Create an Image Stack

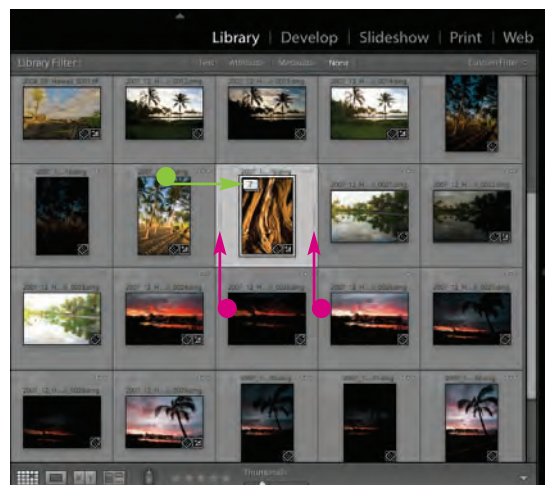
CREATE A STACK OF IMAGES

- 1 In the Grid view, **⌘**+click (Ctrl+click) any images to stack.
- 2 **Control**+click (right-click) one of the selected thumbnails.
- 3 Click **Stacking** in the menu that appears.
- 4 Click **Group into Stack** in the submenu.

Note: You must click the image thumbnail and not the frame.



- The selected photos are stacked together and the top thumbnail displays the number of photos in the stack.
- The frame around the photo shows both a right and a left handle.



CHANGE THE ORDER OF THE STACKED IMAGES

- 1 Click the right handle on a thumbnail stack to expand the stack.
- You can also click the stack number to expand the stack.

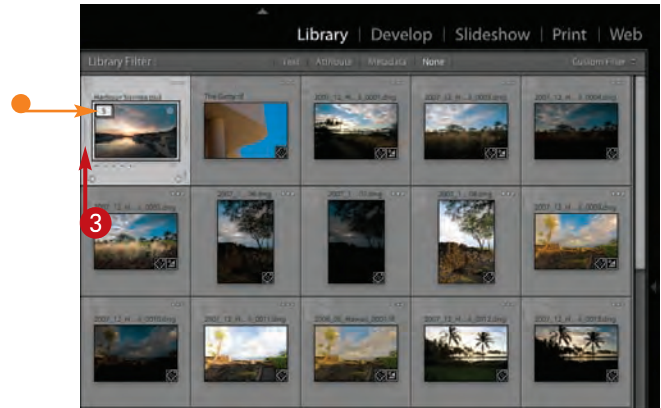
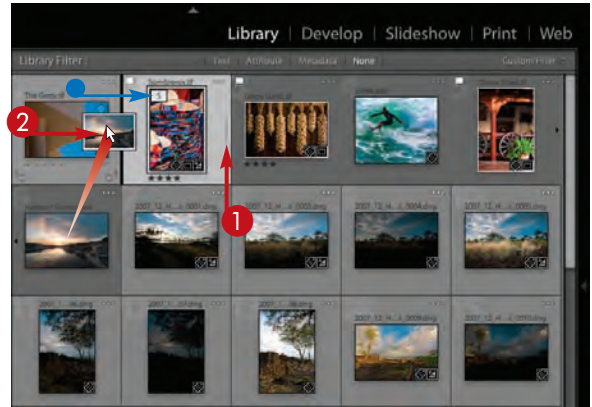
The stack expands and each photo displays a number as the cursor moves over it.

- 2 Click a different thumbnail from the stack and drag it to the left of the first thumbnail in the stack.

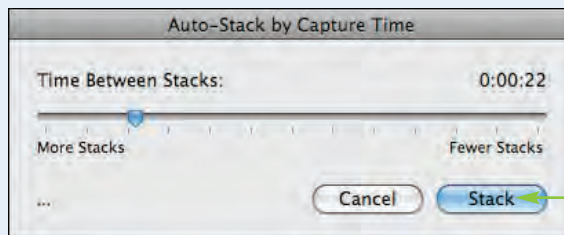
Note: Optionally, press **Shift** + **I** to move the selected photo up in the stack. Repeat if necessary to make the selected photo first in the stack.

- 3 Click the left handle on the thumbnail to collapse the stack.
- You can also click the stack number of the first photo to collapse the stack.

The selected photo now appears on the front of the stack.

**TIPS****What does Auto-Stack by Capture Time in the Stacking submenu refer to?**

The Auto-Stacking feature enables you to group together photos that were shot within a short time frame. Press **⌘** + **A** (**Ctrl** + **A**) to select all the images in a folder. **Control** + click (right-click) one of the selected thumbnails. Click **Stacking** and click **Auto-Stack by Capture Time**. In the dialog box that appears, specify the length of time between shots to limit the stacks and click **Stack** (●). Lightroom automatically creates the stacks according to the time between the shots.

**Is there another way to access the Stacking menu?**

Yes. With the photo thumbnails selected in the grid, click **Photo**, click **Stacking**, and click **Group into Stack**.

Remove or Delete Photos from Lightroom

You may have imported images that are totally dark or totally white or just out of focus, and you want to remove these photos from Lightroom. You can remove the photos from the Lightroom catalog or completely delete the photo files from the drive on which they are stored. Deleting the photo files decreases the size of your photo collection on your storage drives.



Remove or Delete Photos from Lightroom

REMOVE PHOTOS FROM THE CATALOG

- 1 Click a photo to be removed.

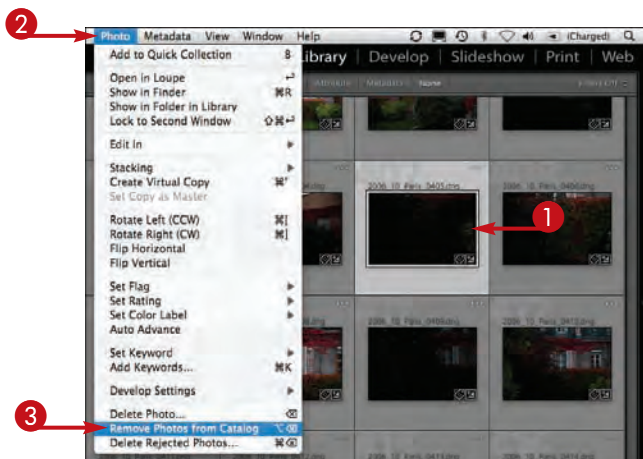
Note: Optionally, +click (+click) multiple photos to be removed.

- 2 Click **Photo**.

- 3 Click **Remove Photos from Catalog**.

Note: Optionally, press +Delete (+Backspace).

The photo is automatically removed from Lightroom's catalog.



DELETE PHOTOS FROM LIGHTROOM AND THE HARD DRIVE

- 1 Click to select a photo to be removed.

Note: Optionally, +click (+click) multiple photos to be removed.

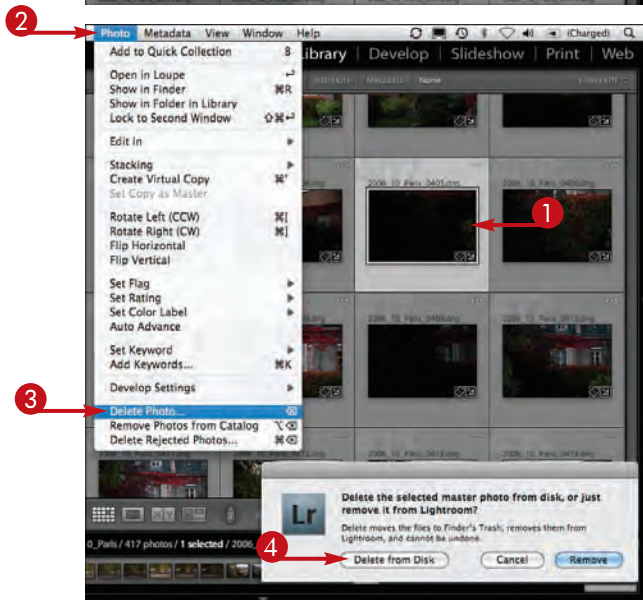
- 2 Click **Photo**.

- 3 Click **Delete Photo**.

Note: Optionally, press ().

A warning dialog box appears.

- 4 Click **Delete from Disk** to move the photo files to the trash.

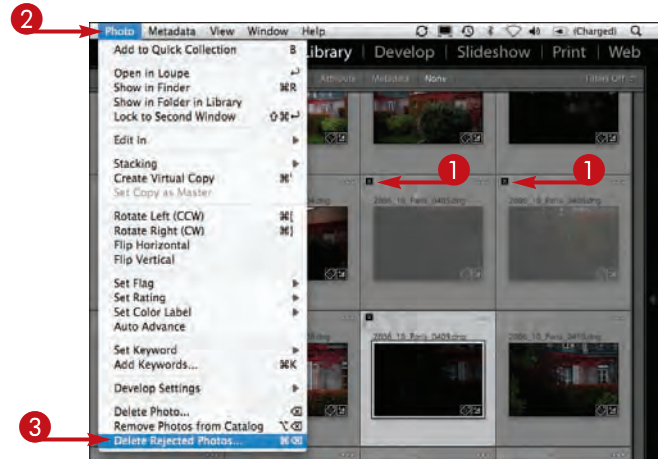


- 1 Delete photos flagged as rejected.

Note: See the task “Customize the Library Toolbar” to flag photos.

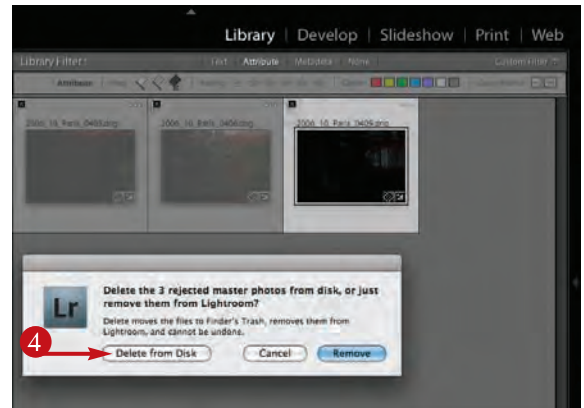
- 2 Click **Photo**.
- 3 Click **Delete Rejected Photos**.

Optional: Press **⌘ + Delete** (**Ctrl + Backspace**).



Only the flagged photos appear in the grid and a warning dialog box appears.

- 4 Click **Delete from Disk** to completely delete the photos from Lightroom and the hard drive.



TIPS

How do I remove a photo from a stack and does removing it from a stack also remove it from the catalog?

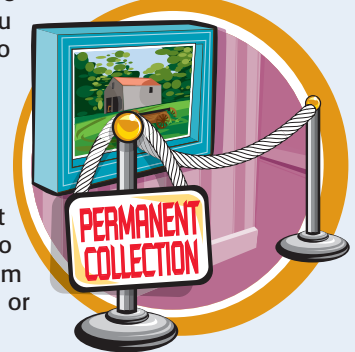
When you remove a photo from a stack, the photo remains in the catalog and on the drive. To remove a photo from a stack, click the right handle to expand the stack.

Control+click (right-click) the photo to be removed, click **Stacking**, and click **Remove from Stack**.



Does a photo I delete from a collection get removed from the hard drive as well?

No. Collections are unique in that you can select a photo in a collection and press **Delete** (**Backspace**) to remove the photo from the collection without deleting the photo from the Lightroom catalog, its folder, or the hard drive.



CHAPTER

4

Personalizing Lightroom



Lightroom's structure enables each photographer to customize many of the settings for his or her own specific needs. From the overall look of the interface to individual photo developing settings, you can personalize Lightroom and customize it for your use.



Understanding Lightroom Presets	108
Set the Essential Lightroom Preferences	110
Customize the Catalog Settings	114
Quickly Change Your Lightroom View	116
Understanding Metadata	118
Apply Metadata in the Library Module	120
Synchronize Metadata between Photos	122
Create a Copyright Metadata Preset.....	124
Design a Personal Identity Plate	126
Modify the Module Buttons	128
Create a Graphical Identity Plate	130

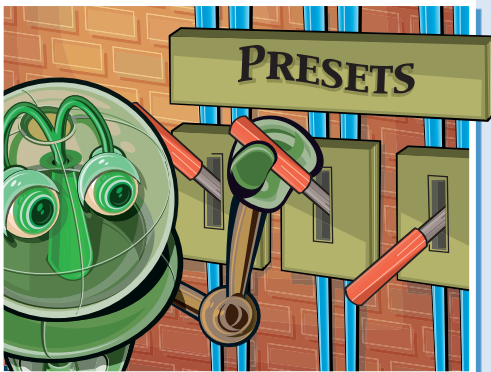
Understanding Lightroom Presets

Lightroom includes presets, or special files with predetermined settings, in all the five modules. You can find presets for naming, sorting, and editing in the Library and Develop modules. You can find similar preset files, called templates, in the Output modules. Presets are designed to help you get the most out of your photos and maximize the power of Lightroom.



Preferences and Presets

Lightroom's preferences help you customize the application as a whole, while Lightroom's presets are specific to each module. The Preferences dialog box includes a tab for setting the general handling of presets and for resetting all the presets to the default settings.



Why Use Presets?

The intent of Lightroom's presets is to save the photographer time when sorting and editing the photo collection, so he can spend more time with the camera and less time with the computer. Presets allow you to reapply the same settings or effects to multiple photos without having to re-create them.



Lightroom Default Presets

Lightroom includes a number of presets for many aspects of the application. You can use the default presets as they are designed, or you can use these as a starting point to enhance an image with your own custom enhancements. You can also use the default presets as a base for creating your own custom presets.



Custom Presets

You can create and save custom presets or templates in all the modules. Once you create a preset or design a template, whether it is for naming photos, enhancing the colors and tone, or for printing, slide shows, or Web galleries, you can save the preset and name it. The next time you need to apply those settings or use the template, your custom preset is listed as one of the options.



Third-Party Presets

You can use presets designed by third parties. You can purchase Lightroom presets, particularly presets for editing and toning images. Other Web sites include free downloads of custom designed Lightroom presets.



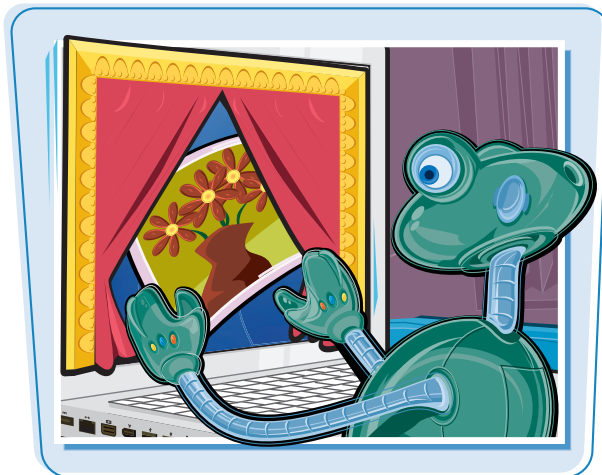
Installing Presets

Presets or templates you purchase or download must be installed into Lightroom. Copy the third-party files on your hard drive and open Lightroom. In the Develop module click the **Presets** [icon]; in the Slideshow, Print, or Web modules, click the **Template Browser** [icon]. **Control**+click (right-click) on **User Presets** or **User Templates**, and select **Import** to find and load the files.



Set the Essential Lightroom Preferences

Although you can use Lightroom without changing any preferences, many photographers prefer customizing some of the ways Lightroom appears or functions. You can select and set preferences to customize Lightroom for your individual use and to make you more efficient with your photo projects.



Set the Essential Lightroom Preferences

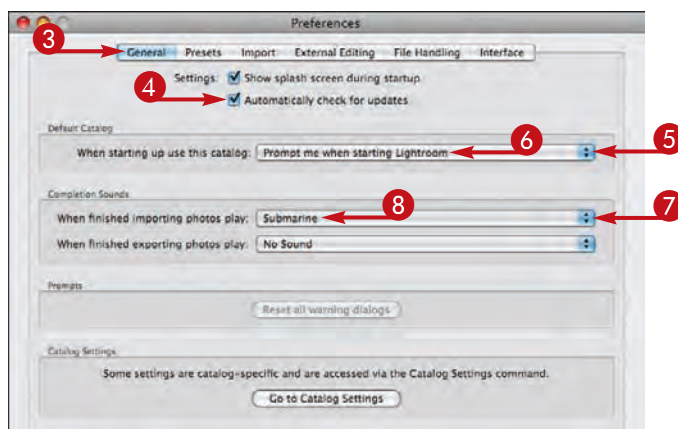
Note: The selections listed in the steps are suggestions for setting preferences. You can change the preferences to fit your projects.

- 1 Click **Lightroom** (click **Edit**).
- 2 Click **Preferences**.



The Preferences dialog box appears.

- 3 Click **General**.
- 4 Click **Automatically check for updates** (☐ changes to ☒.
- 5 Click the **When starting up use this catalog** ▾.
- 6 Click **Prompt me when starting Lightroom**.
- 7 Click the **When finished importing photos play** ▾.
- 8 Click a system sound to play when Lightroom completes the import process.



9 Click **Presets**.

The Presets preferences appear in the dialog box.

10 Click **Apply auto grayscale mix when converting to grayscale** (☒ changes to ☐.

11 Click **Store Presets with catalog** (☐ changes to ☒.

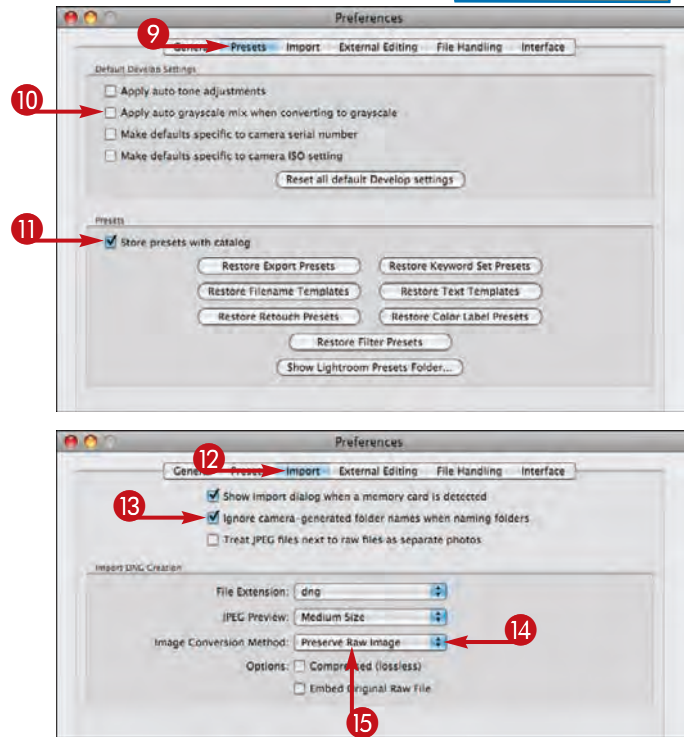
12 Click **Import**.

The Import preferences appear in the dialog box.

13 Click **Ignore camera-generated folder names when naming folders** (☐ changes to ☒.

14 Click the **Image Conversion Method**.

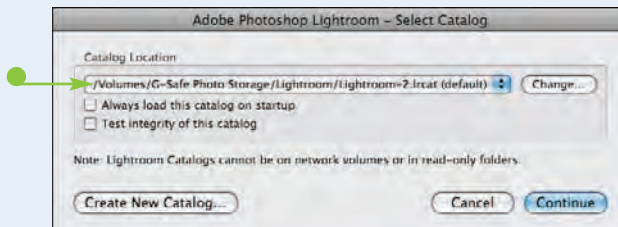
15 Click **Preserve Raw Image** to maximize the amount of data preserved in the original raw file when importing into the DNG format.



TIPS

Why should I select Prompt me when starting Lightroom as in Step 6?

Many photographers maintain multiple catalogs, either because of a very large volume of images in their collection or to separate projects. Having Lightroom prompt you to select a specific catalog (●) as it launches ensures that the application opens the way you intended.

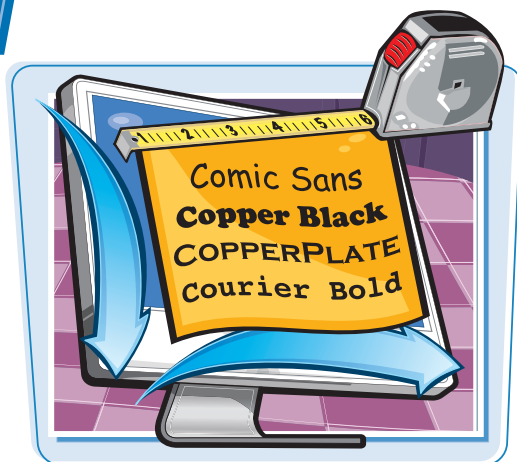


What is the benefit of storing the presets with the catalog?

When you copy catalogs from one computer to another with the presets stored with the catalog – for example, from your desktop machine to your travel laptop – the same presets are available on both systems so you can work consistently with your images. Leaving the box unchecked stores the presets on the local machine and makes those presets available to all catalogs on that one computer.

Set the Essential Lightroom Preferences *(continued)*

Compared to most applications, Lightroom has relatively few preferences options. Some are essential for the way you work. Others, such as the Panel End Marks and Panel Font Size, enable you to customize the visual appearance of the interface itself. Learning how to configure specific preferences helps you get the most out of Lightroom.



Set the Essential Lightroom Preferences *(continued)*

- 16 Click **External Editing**.

Note: Lightroom automatically sets Photoshop CS3 as the external editor if that program is installed on the computer.

- 17 Click the **Color Space** ▾.

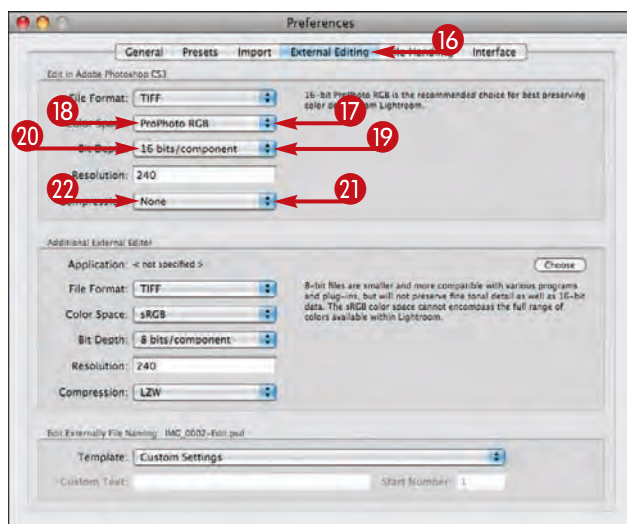
- 18 Click **ProPhoto RGB**.

- 19 Click the **Bit Depth** ▾.

- 20 Click **16 bits/component**.

- 21 Click the **Compression** ▾.

- 22 Click **None**.



- 23 Click **File Handling**.

- 24 Click the **Treat the following characters as illegal** ▾.

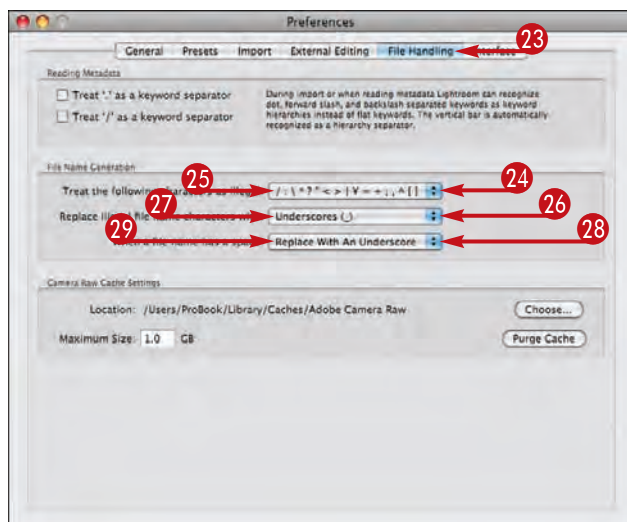
- 25 Click the list of symbols.



- 26 Click the **Replace illegal file name characters with** ▾.

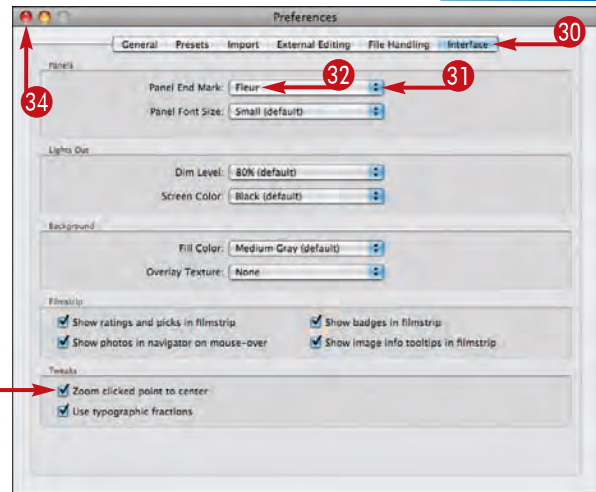
- 27 Click **Underscores**.

- 28 Click the **When a file name has a space** ▾.


- 29 Click **Replace With An Underscore**.

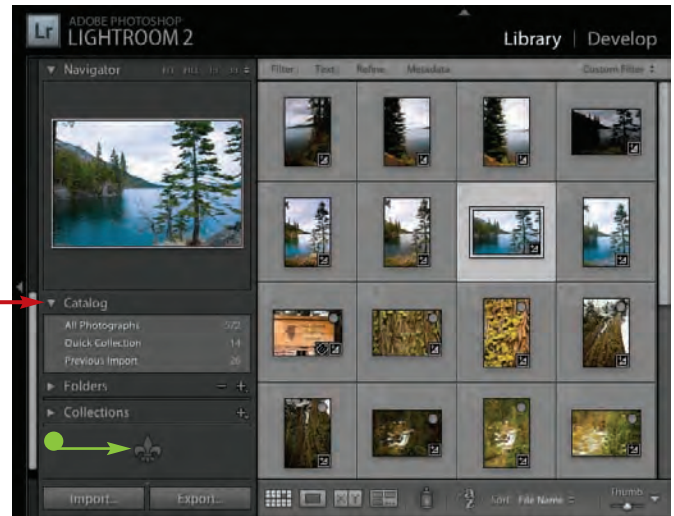


- 30 Click **Interface**.
- 31 Click the **Panel End Mark** .
- 32 Click **Fleur**.
- 33 Click **Zoom clicked point to center** (☐ changes to ☒.
- 34 Click  (click **OK**).



The Preferences dialog box closes.

- 35  +click (**Ctrl**+click) the **Catalog** .
- The left panel sections close, showing the Fleur-styled panel end mark.



TIPS

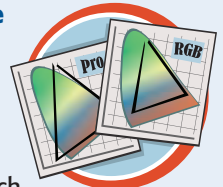
Why is medium gray the best background fill color?

Because you are making decisions about your photos by what you see on the screen, you want to view the images without any influence from surrounding colors. Medium gray does not affect the color or contrast of a photo. Black increases the visual contrast in a photo, and white makes the colors and contrast appear less pronounced.



Why select ProPhoto RGB and not Adobe RGB for the color space in Adobe Photoshop?

If you shoot in RAW, you want to preserve the most color information possible throughout the photo processing. By editing your photos in ProPhoto RGB, which is a larger color space than Adobe RGB, you do not downgrade the colors your camera sensor captured. Also, maintaining the 16-bit setting when moving from Lightroom to Photoshop preserves the most data in the file.



Customize the Catalog Settings

Catalog settings determine where the catalog is stored on your computer, the size and quality of the Lightroom previews you use for editing your photos, and metadata options. You can also set Lightroom to automatically back up the catalog data as an added safety measure.



Customize the Catalog Settings

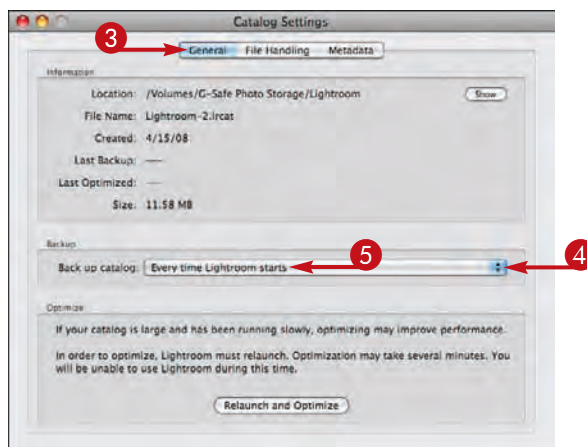
Note: The selections listed in the steps are suggestions for catalog settings. You can change the settings to fit your hardware and projects.

- 1 Click **Lightroom** (click **Edit**).
- 2 Click **Catalog Settings**.



The Catalog Settings dialog box appears.

- 3 Click **General**.
- 4 Click the **Back up catalog** button.
- 5 Click **Every time Lightroom starts**.

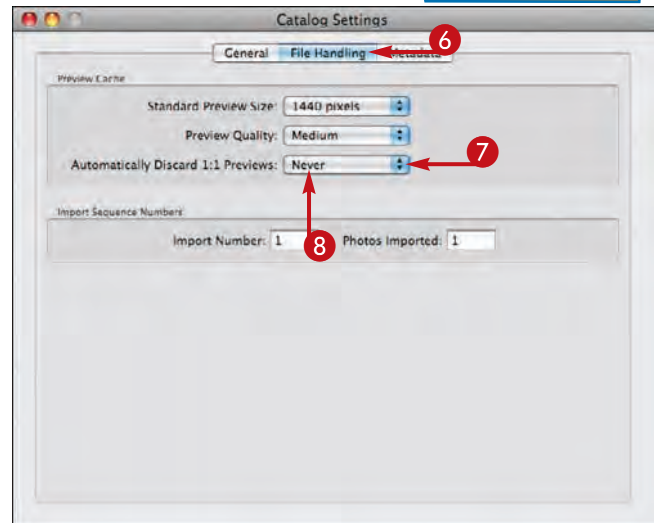


6 Click **File Handling**.

The File Handling options appear.

7 Click the **Automatically Discard 1:1 Previews** ▾.

8 Click **Never**.

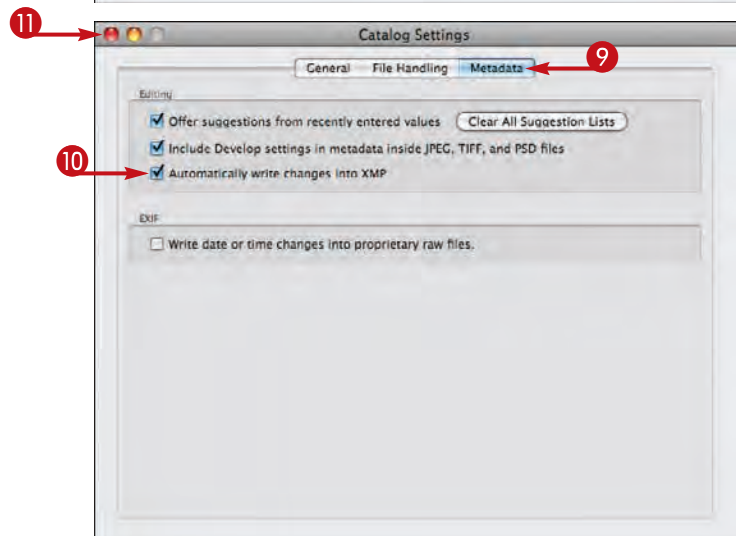


9 Click **Metadata**.

10 Click **Automatically write changes into XMP** (☐ changes to ☑).

Note: Lightroom cannot write data changes into a manufacturer's camera raw file. When you write the changes to XMP, Lightroom saves the data in a sidecar file so applications such as Bridge and Photoshop can see the edits you have already applied to the image.

11 Click (click **OK**) to save and close the Catalog Settings.



TIPS

Why would I want to discard the 1:1 previews?

Lightroom generates 1:1 previews when you work on an image. Ideally you would want to keep the full size previews available to save rendering time when you open the photo. The larger previews take up more space. So if you are finished working on some images, you might want to discard the large previews to save disk space.



Why are there several options for standard preview size?

The standard preview size is the maximum dimensions for the rendered preview in Lightroom. Select a size that is in line with your monitor's resolution. If you have a high-resolution display, a large preview size gives you a better view of the photos.



Quickly Change Your Lightroom View

Lightroom is designed to let you focus on your photographs. You can change the Lightroom interface by hiding or showing any of the different panels as described in Chapter 3. You can also quickly view your photo with no distractions and in any module as you work, by changing from a normal Lightroom interface to a full screen view with one keystroke.



Quickly Change Your Lightroom View

- 1 In the Library module, click **Loupe View** (🔍) to see a Loupe view of a photo.
- 2 Press **Shift+Tab**.



All the panels disappear and the image fills the space.

- 3 Press **F** twice.



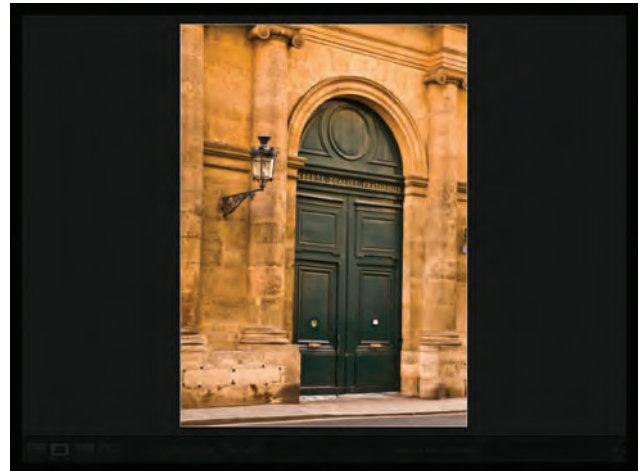
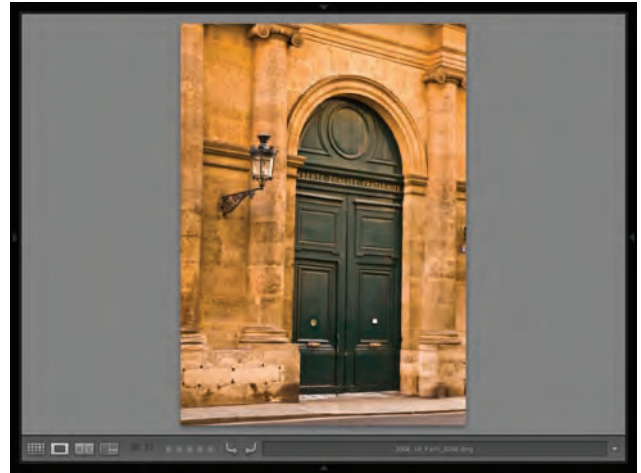
First the title bar disappears and then the menu bar disappears. The Lightroom interface fills the entire screen.

4 Press **L**.

The lights dim and the photo appears as large as possible surrounded by an 80% gray border.

5 Press **L** twice to return to normal lights.

6 Press **Shift** + **Tab** to return all the panels.



TIP

What are the keyboard shortcuts for screen view options?

F	Toggle through Screen Modes
⌘ + Shift + F (Ctrl + Shift + F)	Full Screen and Hide Panels
L	Toggle through Lights Dim, Lights Out, and Normal
Tab	Toggle Side Panels
Shift + Tab	Toggle All Panels
F5	Toggle Module Picker On and Off
F6	Toggle Filmstrip On and Off
F7	Toggle Left Module Panels On and Off
F8	Toggle Right Module Panels On and Off
T	Toggle Toolbar On and Off

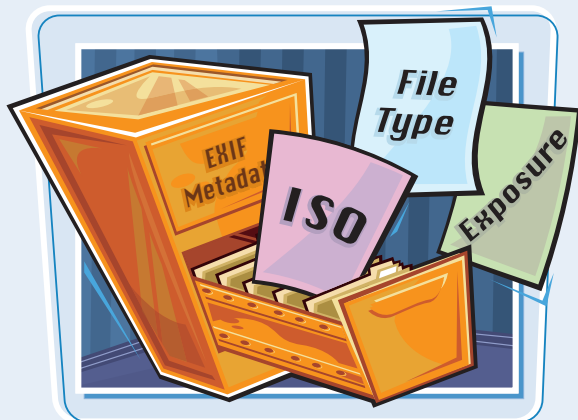
Understanding Metadata

Metadata is data about data. *Metadata* in Lightroom refers to all the data that accompanies a digital photo file. It includes EXIF metadata and IPTC metadata. Lightroom also lets the photographer add a variety of descriptive information to the files for easier sorting and organizing in a catalog.



EXIF Metadata

EXIF metadata is the technical information automatically embedded in the digital file by the camera and generally describes all the camera settings such as ISO, exposure, and file type, as well as the camera and lens model used to capture the image. The specific EXIF metadata applied depends on the camera manufacturer and model.



IPTC Metadata

IPTC metadata is a standard format established by the International Press Telecommunication Council for attaching specific information about a photograph originally intended for use by the press. You can follow the specifications for IPTC fields to add information about the photo category, subject code, and more.



Applying Metadata

Lightroom's Metadata section includes EXIF and IPTC information, as well as general data such as ratings, contact, and copyright information, to help you identify your images. You can apply metadata when you import and when you organize photos in the Library module. You can also create sets with specific metadata and save them as templates.



Metadata in the Catalog

The metadata for each image, along with the previews and keywords, is written into the catalog. You can edit the metadata for a photo even when the actual photo is not on an attached drive, which allows you to organize your image archive on any computer on which you have the Lightroom catalog.



Save Metadata with the Photo Files

In order to export images or to edit them in Photoshop or another application, you must set Lightroom to save the metadata with the file so the external application, such as Bridge or Photoshop, is aware of the changes already applied. For DNG photo files, Lightroom writes the metadata directly in the file. For camera RAW files, you must set the Metadata preferences in the Catalog Settings to automatically write changes into XMP to link the XMP sidecar file to the RAW file.



Apply Metadata in the Library Module

You can modify or add specific metadata for one photo or a group of photos in the Library module. The Metadata pane in the right Library panel includes fields for rating stars, labels, titles, scene location, and more. You can add as much detail as you want to any photo.



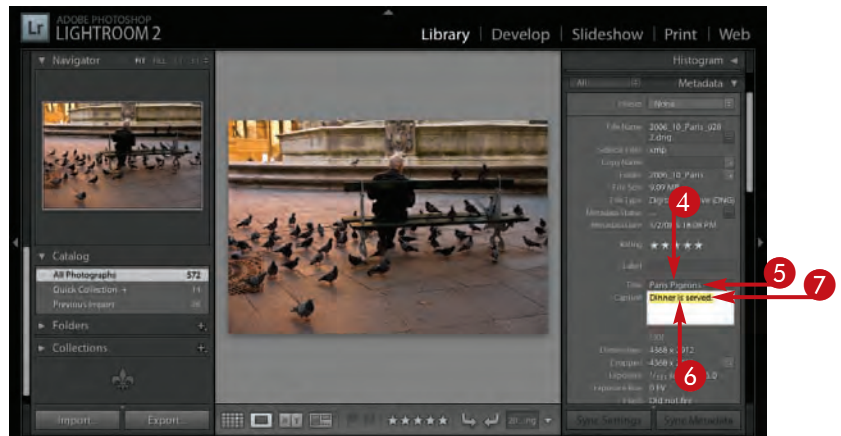
Apply Metadata in the Library Module

- 1 In the Library module, click a photo to select it.
- 2 Click the **Histogram** ▾ to close the Histogram pane.
- 3 Click the **Metadata** ◀ in the right panel.



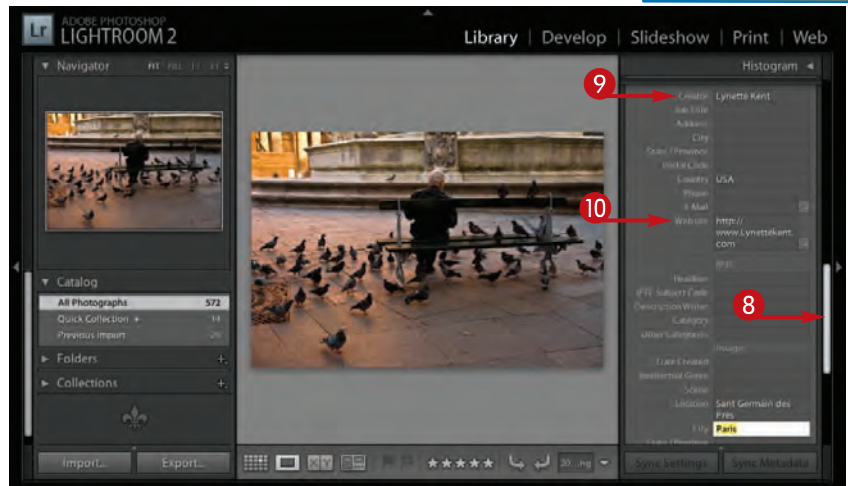
The Metadata section opens.

- 4 Click in the Title field.
- 5 Type a title for the photo.
- 6 Click in the Caption field.
- 7 Type a caption for the photo.



- 8 Click and drag the scroll bar to view more Metadata fields.
- 9 Click in the Creator field and type your name.
- 10 Click in the Website field and type your site name.

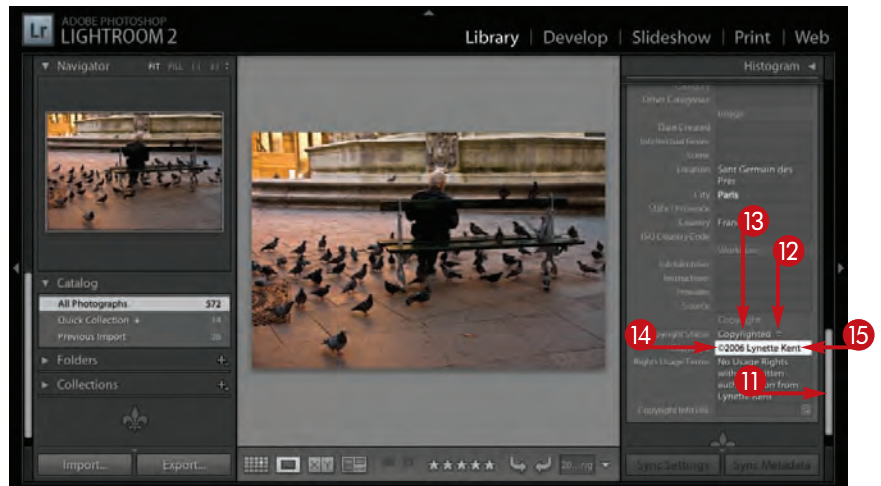
Note: Optionally, enter relevant information into any other field.



- 11 Click and drag the scroll bar to the bottom of the Metadata pane.
- 12 Click the **Copyright Status** dropdown.
- 13 Click **Copyrighted**.
- 14 Click in the Copyright field.
- 15 Type your copyright information.

Any metadata you add is applied to the selected photo.

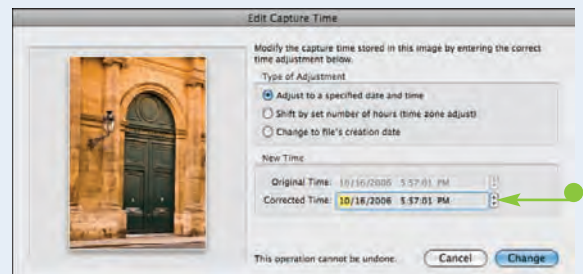
Note: If you **⌘**+click (**Ctrl**+click) individual photos in the Filmstrip or the grid to select them, any information you add in the Metadata pane is applied to all the selected photos at once.



TIP

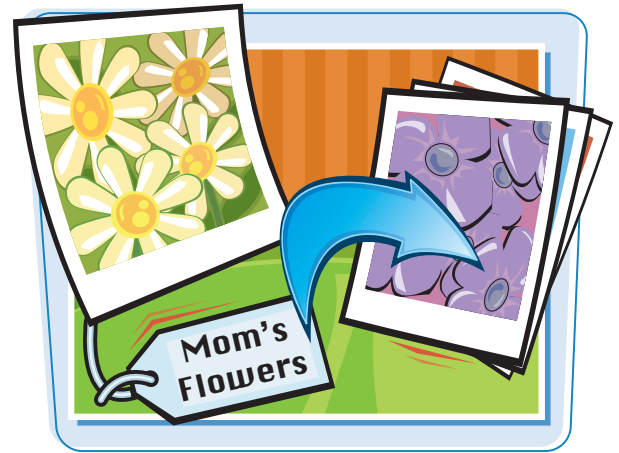
Can I change the EXIF metadata?

You cannot change EXIF metadata for a photo with one exception. You can change the recorded capture time. If the date and time of the camera was not properly set or if the shot was taken in a different time zone, you can correct the data by selecting **Metadata** and then **Edit Capture Time**. In the dialog box that appears, set the correct date and time (●) and click **Change**.



Synchronize Metadata between Photos

You can add metadata to one photo and then selectively synchronize this information from the selected image file to a group of selected images. Synchronizing is different from applying the metadata to multiple photos because you can select specific data from the master image file to be synchronized to the other photos.




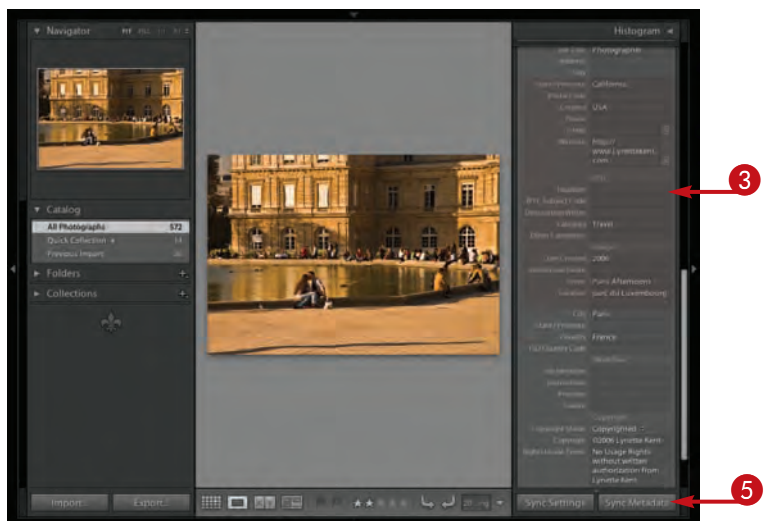
Synchronize Metadata between Photos

- 1 Click a photo in the Library module to select it.
- 2 Click the **Metadata** .



The Metadata pane expands.

- 3 Repeat any of the steps from the previous task to enter metadata.
- 4  +click (Ctrl)+click other photos in the Filmstrip or in the grid.
- 5 Click **Sync Metadata**.

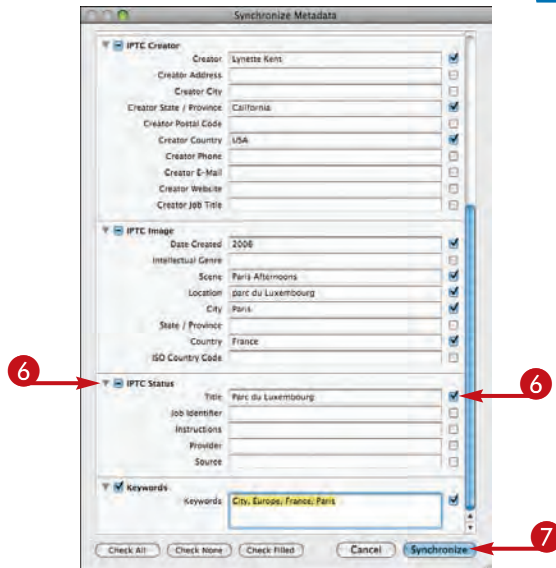


The Synchronize Metadata dialog box appears.

- 6 Deselect any metadata or categories that do not apply to all the selected photos (☒ changes to ☐).

Note: Optionally, click any metadata and type the information to be added to any empty fields that apply to all the selected photos.

- 7 Click **Synchronize**.



Note: If a warning dialog box appears, click **Don't Save** to synchronize the metadata for all the selected photos and not set the selections as a new preset.

The selected metadata is applied to all the selected photos.



TIPS

How do I type the copyright symbol?

On a Mac, press **Option + G** to create the copyright symbol. On a PC, press **Ctrl + Alt + C** or press **Alt + 0169** on the numeric keypad.

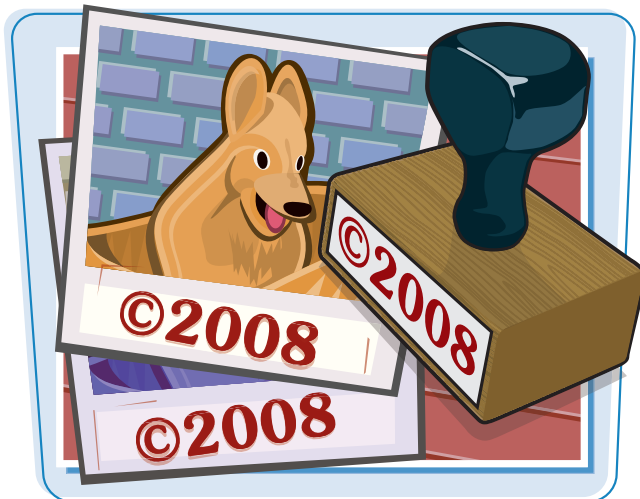


What is the benefit of taking the time to add all that metadata?

Lightroom's database engine is one of the main advantages of the application. Lightroom searches the database quickly by using the metadata information that is linked or embedded in the photo files. Once you apply metadata you can easily search to more quickly find the images you need.

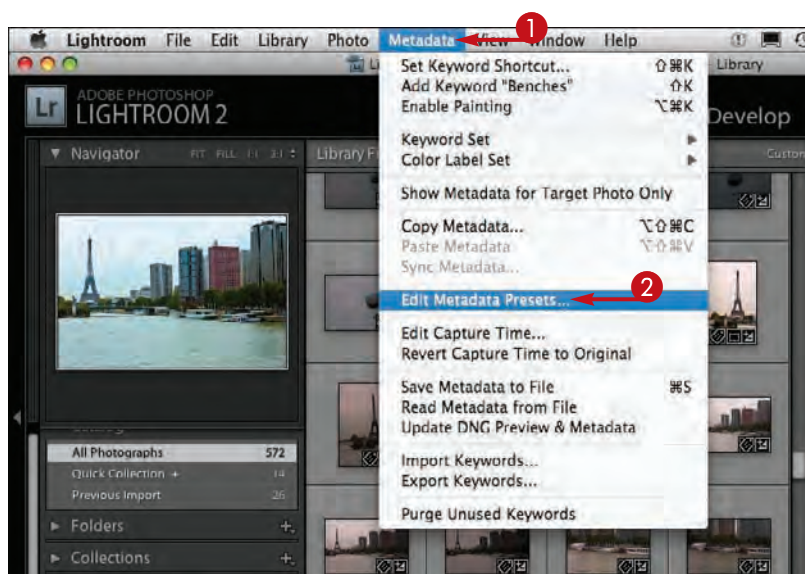
Create a Copyright Metadata Preset

You can create various metadata presets to apply the same specific information to images without having to enter the data over and over. A copyright metadata preset is particularly useful to quickly apply your name and copyright to images when importing or as you categorize them in the Library module.



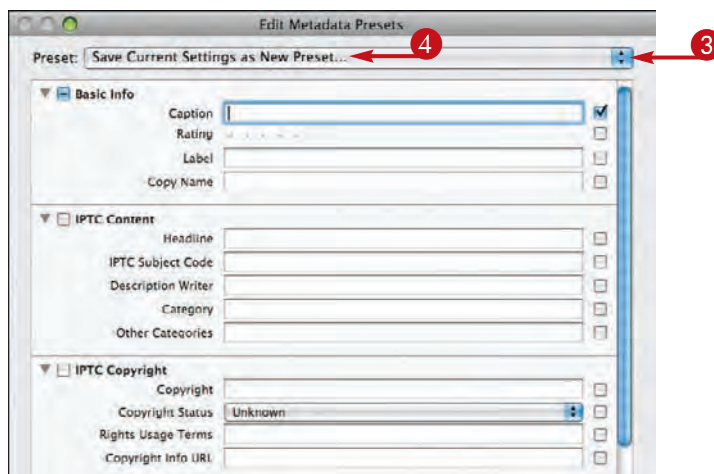
Create a Copyright Metadata Template

- 1 In the Library module, click **Metadata**.
- 2 Click **Edit Metadata Presets**.



The Edit Metadata Presets dialog box appears.

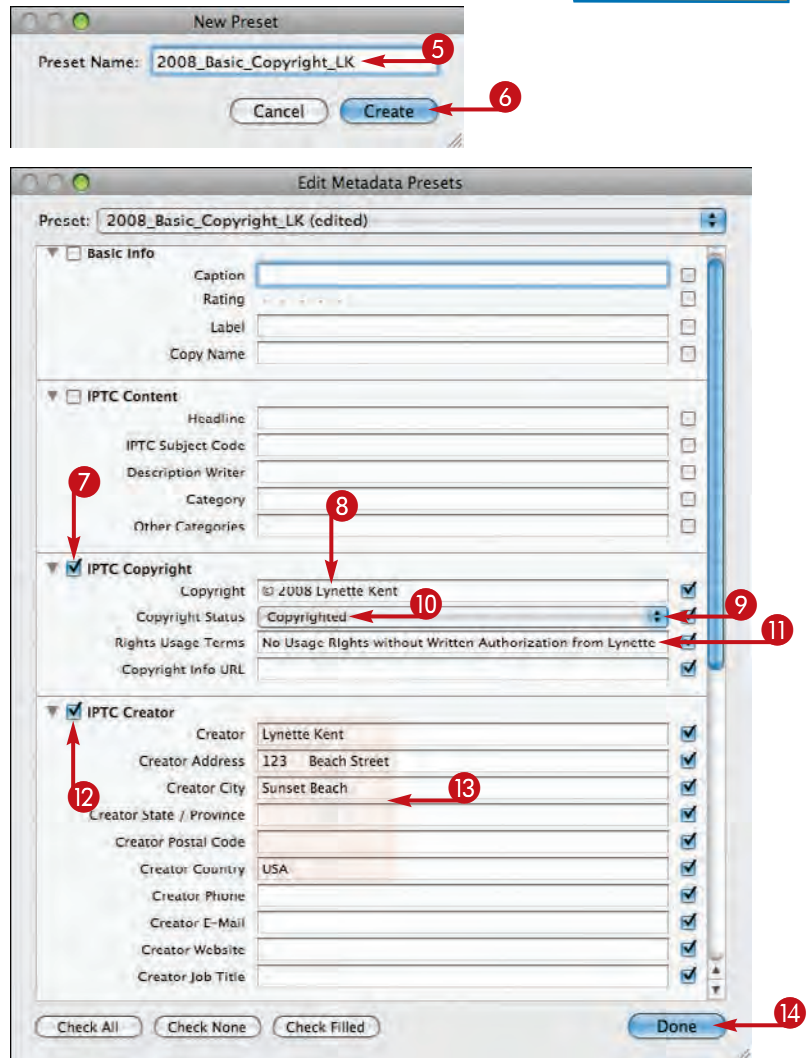
- 3 Click the **Preset** button.
- 4 Click **Save Current Settings as New Preset**.



A New Preset dialog box appears.

- 5 Type a name for your copyright into the field.
- 6 Click **Create**.
- 7 Click **IPTC Copyright** (☐ changes to ☒)
- 8 Click in the **Copyright** field and type your copyright.
- 9 Click the **Copyright Status** ▾.
- 10 Click **Copyrighted**.
- 11 Click in the **Rights Usage Terms** field and type the usage rights you want to use.
- 12 Click **IPTC Creator** (☐ changes to ☒)
- 13 Click in each of the fields and type any information you want to include.
- 14 Click **Done**.

The copyright metadata preset is now available.



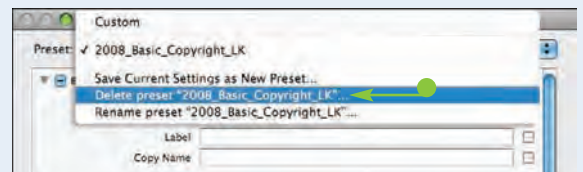
TIPS

Are there more ways to create and access the metadata presets?

Metadata presets can be created and even edited during the import process or directly from the menu bar as in the task above. You can also apply, edit, or create new metadata presets in the Metadata panel by clicking the **Presets** ▾ and selecting a preset to change or selecting **Edit Presets**.

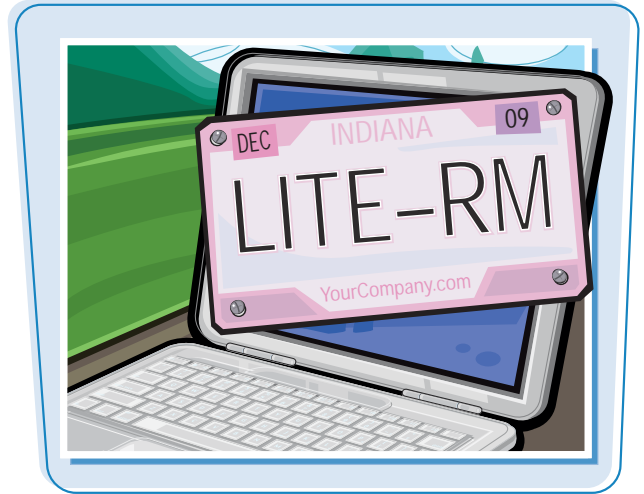
How can I remove or delete a metadata preset?

You can delete a metadata preset in the Edit Metadata Presets dialog box. With a preset selected in the dialog box, click the **Preset** ▾. Click **Delete preset "the name of the preset"** (●).



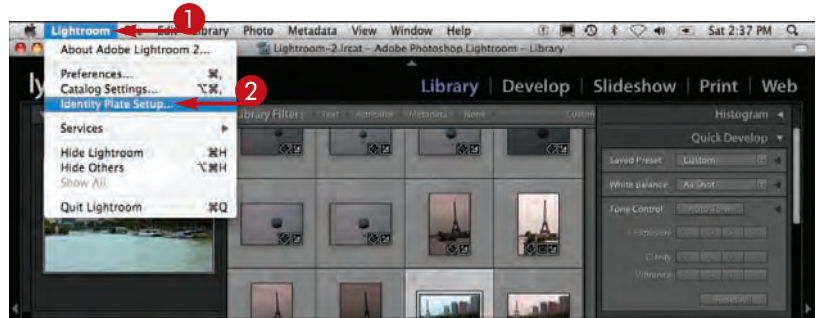
Design a Personal Identity Plate

You can personalize the Lightroom interface by changing the top panel, which includes both the identity plate and the module buttons. Because Lightroom is intended to help the photographer catalog, edit, and present photos to clients, you can create a personal identity plate with your name or company logo to appear not only on the Lightroom interface but also on the final output, such as a Web gallery or print page.



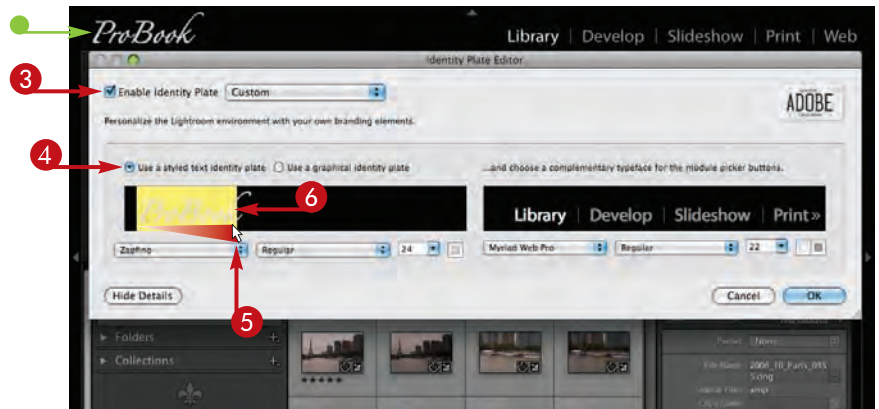
Design a Personal Identity Plate

- 1 Click **Lightroom** (click **Edit**).
- 2 Click **Identity Plate Setup**.

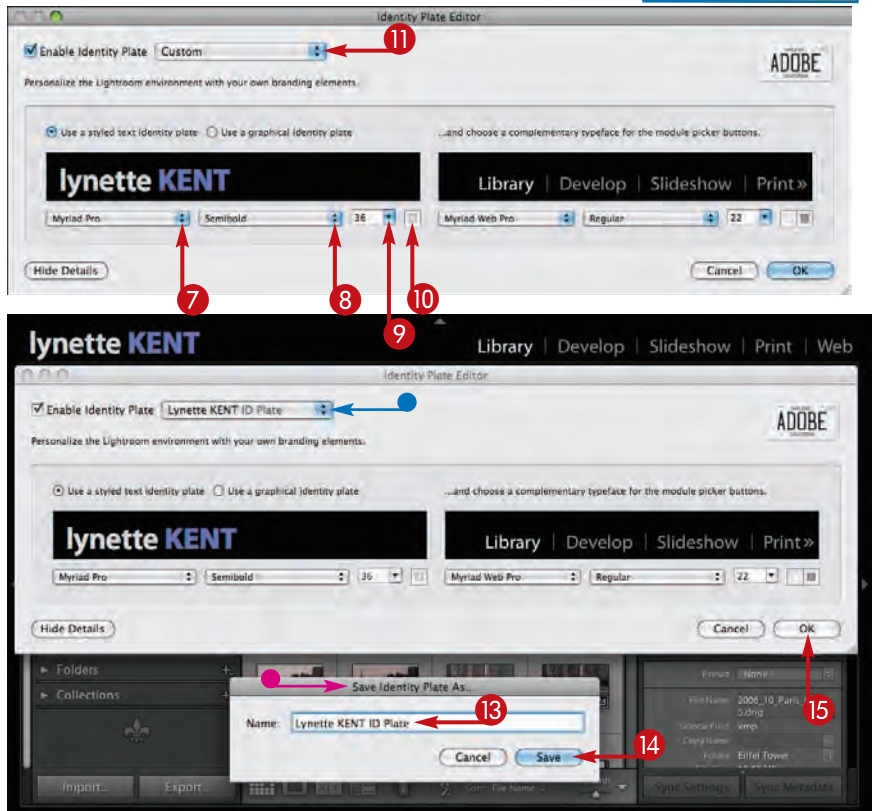


The Identity Plate Editor appears.

- 3 Click **Enable Identity Plate** (☐ changes to ☒).
- Lightroom automatically picks up the login name and places it in the top left corner of the interface.
- 4 Click **Use a styled text identity plate** (☐ changes to ☒).
- 5 Click and drag across the existing login name.
- 6 Type your name.



- 7 Click the **Font** [] to select a font.
- 8 Click the **Font Family** [] to select a font family.
- 9 Click the **Size** [] to select a size.
- 10 Click the color box [] to change the color.
- 11 Click the **Enable Identity Plate** [] .
- 12 Click **Save As** from the menu that appears.
 - The Save Identity Plate As dialog box appears.
- 13 Type a name for the identity plate in the field.
- 14 Click **Save**.
 - The custom identity plate name now appears as a selection in the Identity Plate Editor pull-down menu.
- 15 Click **OK** to close the Identity Plate Editor.



TIPS

Can I have more than one custom identity plate to use at different times?

Yes. You can create multiple identity plates both with text and with graphics. You can create one identity plate for each client or project. Save and name the identity plates you create in the Identity Plate Editor and they will all appear in the pull-down menu for quick and easy interface changes.



Where else can I use the identity plate other than the basic Lightroom Interface?

The output modules — Slideshow, Print, and Web — each include an option to add your identity plate to the finished files. You can also set the Scale and Opacity of the identity plate as it appears on the slide shows, prints, or Web galleries.



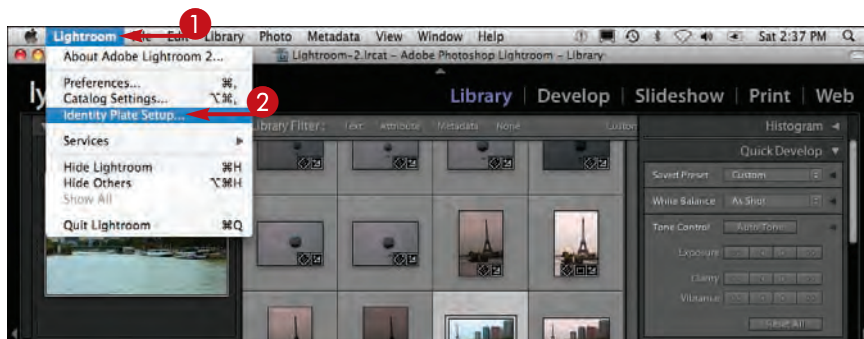
Modify the Module Buttons

If you show your photos to clients or friends using your computer, you may want to unify the look of the Lightroom interface by customizing the module buttons. Also, if your custom identity plate is wide, you may want to adjust the size of the module buttons to fit the available space in the top panel.



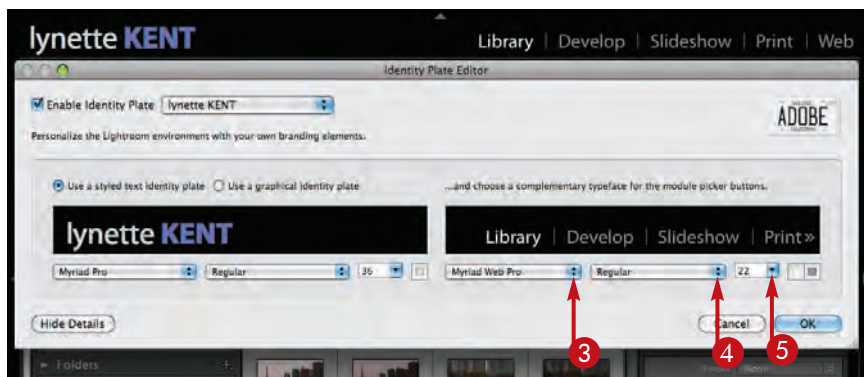
Modify the Module Buttons

- 1 Click **Lightroom** (click **Edit**).
- 2 Click **Identity Plate Setup**.

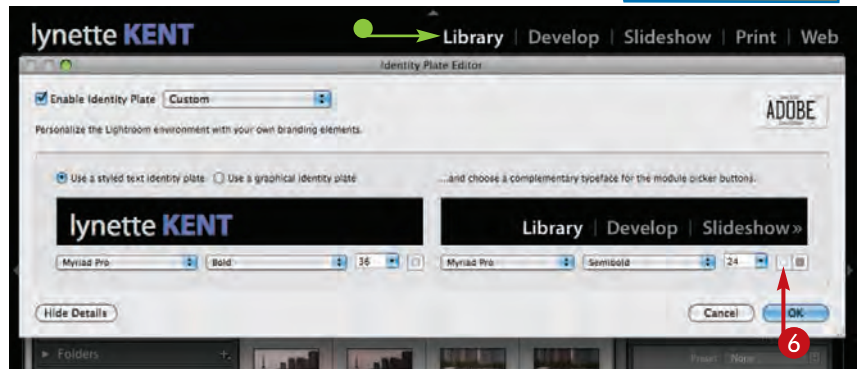


The Identity Plate Editor appears.

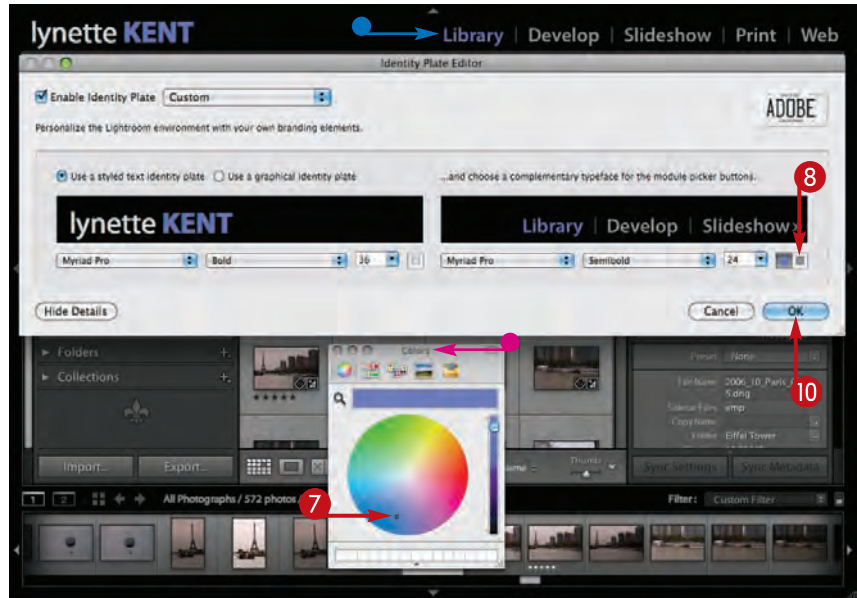
- 3 Click the **Font** button to select a font for the module buttons.
- 4 Click the **Font Family** button to select a font family.
- 5 Click the **Size** button to select a font size.



- The changes to the font are shown in the sample and are immediately reflected in the top panel module buttons.
- 6 Click the left box () to change the active color.



- The color picker appears.
- 7 Click in the color picker to select the active color.
- 8 Click the right box () to change the base color.
- 9 Repeat Step 7 to select the base color.
- 10 Click **OK**.
- The module buttons appear in the colors you chose.



TIPS

Can I make an identity plate to use as an overlay when printing proof contact sheets?

Yes. Create an identity plate as in the previous task using the word **PROOF** in white. Save it as a custom identity plate. In the Print module, click **Identity Plate** in the Overlays pane. Click and drag the **Opacity** and **Scale** sliders to fit your image. Click the rotation degree and set the angle (●). Click **Render on every image** to have the word **PROOF** on each photo on the contact sheet.



When I change the Identity Plate in the Overlay selection does the top panel identity plate change as well?

No. When you select a specific identity plate as an overlay in one of the output modules, the main identity plate in the top panel remains with your original selection.

Create a Graphical Identity Plate

Using Photoshop or Photoshop Elements, you can add your logo or create any graphic file to save and use as an identity plate. You can even include tiny photo thumbnails by reducing the size of the photos and adding these as layers in your design. The process is very similar in both Photoshop and Photoshop Elements.



Create a Graphical Identity Plate

- 1 Launch Photoshop or Photoshop Elements.
- 2 Click **File** and select **New**.

Note: Optionally, type a name in the Name field.

- 3 Type **57** pixels in the height field.

Note: Lightroom requires a maximum height of 60 pixels high at 72 ppi for the identity plate.

- 4 Set the width to approximately one half the width of your largest monitor screen.
- 5 Set the resolution to **72** ppi.

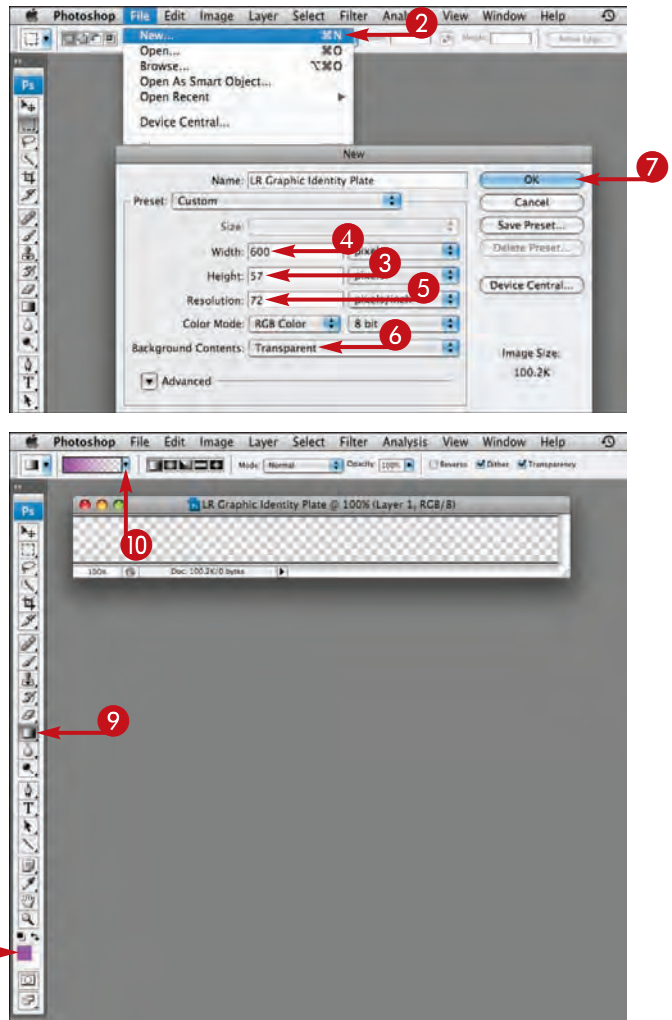
Note: This resolution is not for printing.

- 6 Click the **Background Contents** button and select **Transparent**.
- 7 Click **OK**.

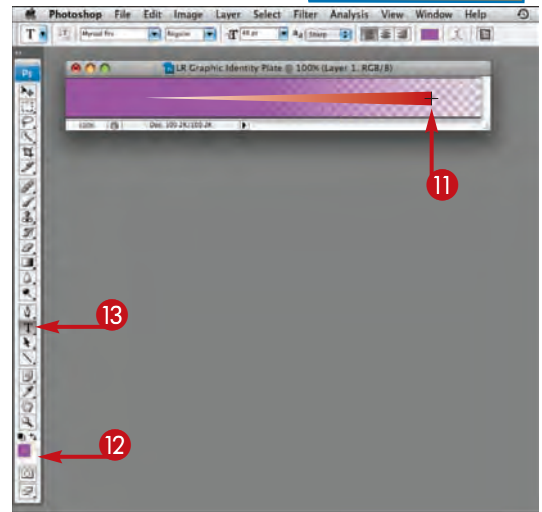
A new document appears.

Note: You can use type, copy and paste your pre-designed logo, add photo thumbnails, or create any art for your identity plate. The following are suggestions for a gradient identity plate.

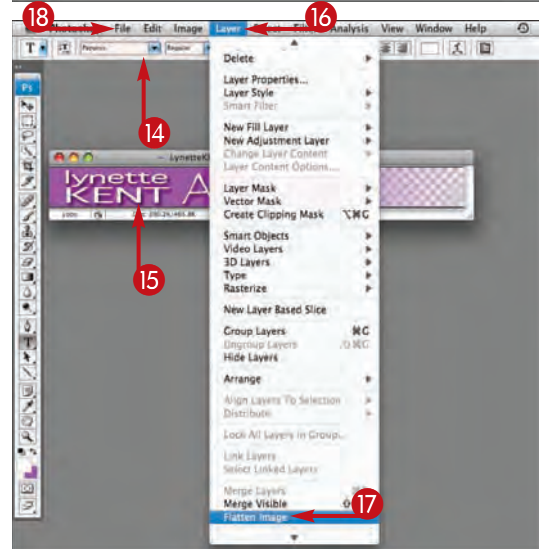
- 8 Click the foreground color to select a color.
- 9 Click the **Gradient** tool.
- 10 Click the gradient picker and select the Foreground to Transparent option.



- 11 Click and drag in the image to create a gradient fading to transparent.
- 12 Click the foreground color to select white.
- 13 Click the **Type** tool (T).



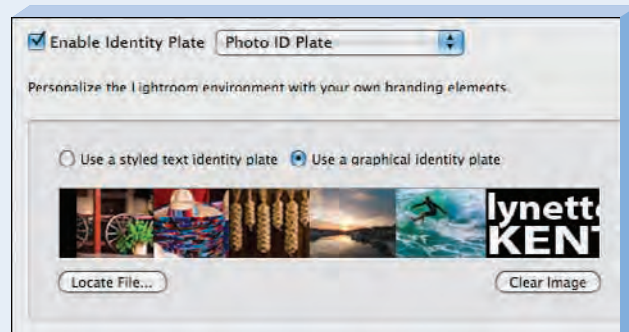
- 14 Select the font, font family, and size.
- 15 Click in the document and type your text.
- 16 Click **Layer**.
- 17 Click **Flatten Image**.
- 18 Click **File** and select **Save**. Name the custom identity plate in the Save As dialog box, and save it in the Lightroom folder on your hard drive or a convenient location.



TIP

How do I place my graphical identity plate into Lightroom?

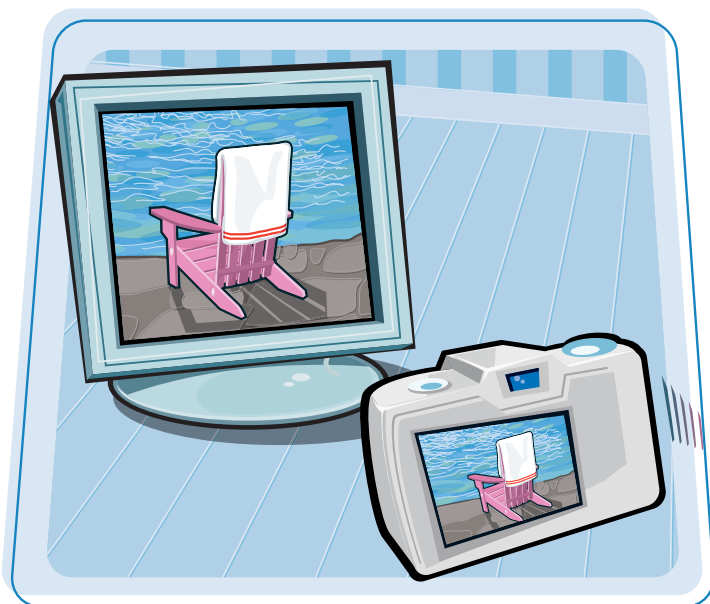
Follow the steps in the Design a Personal Identity Plate task to open the Identity Plate Editor. Click **Enable Identity Plate** (☐ changes to ☑). Click **Use a graphical identity plate** (○ changes to ●). Click **Locate File** and navigate to the file you just created. Your design automatically appears in the Editor and in the top panel in Lightroom.



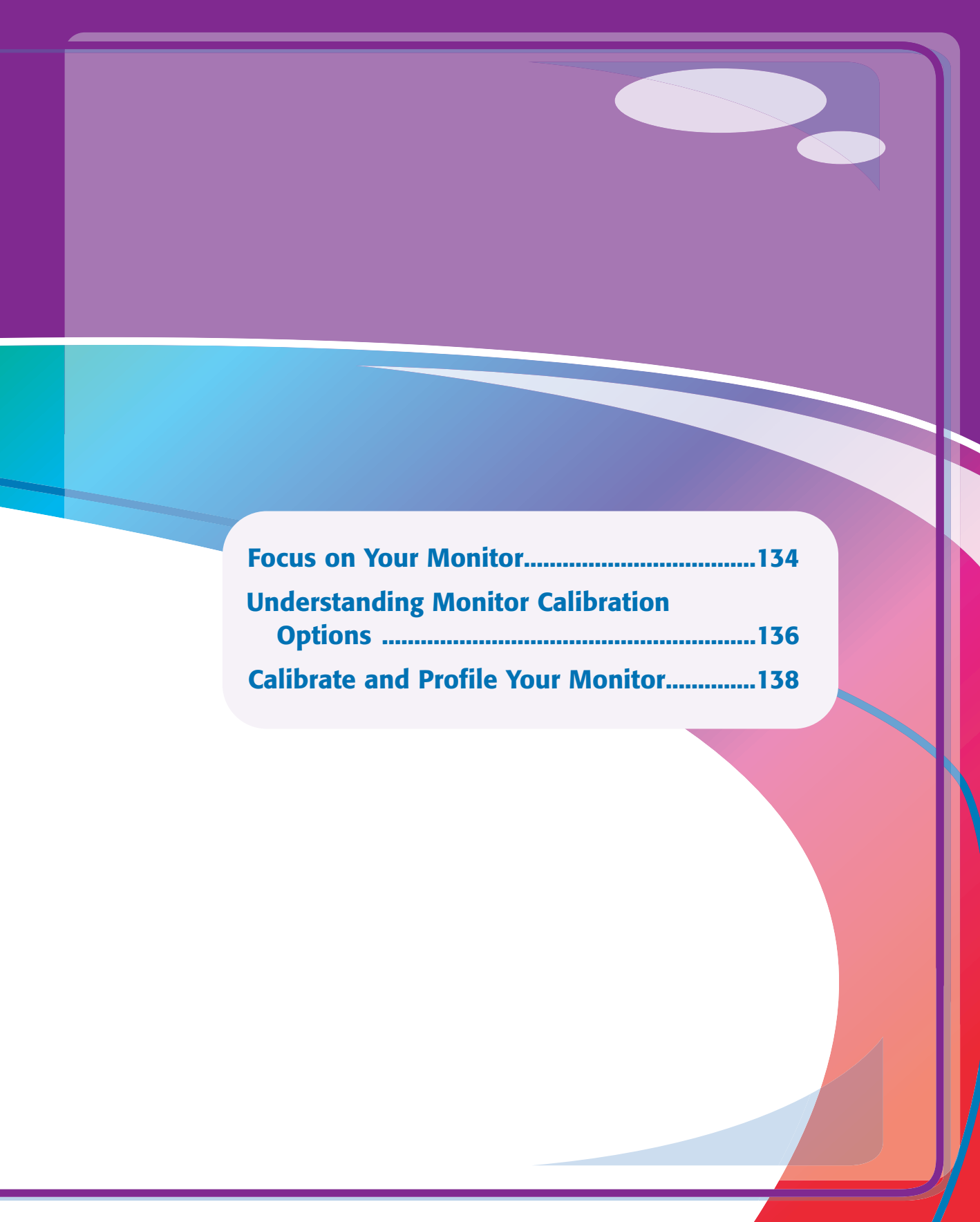
CHAPTER

5

Setting the Stage for Digital Photo Developing



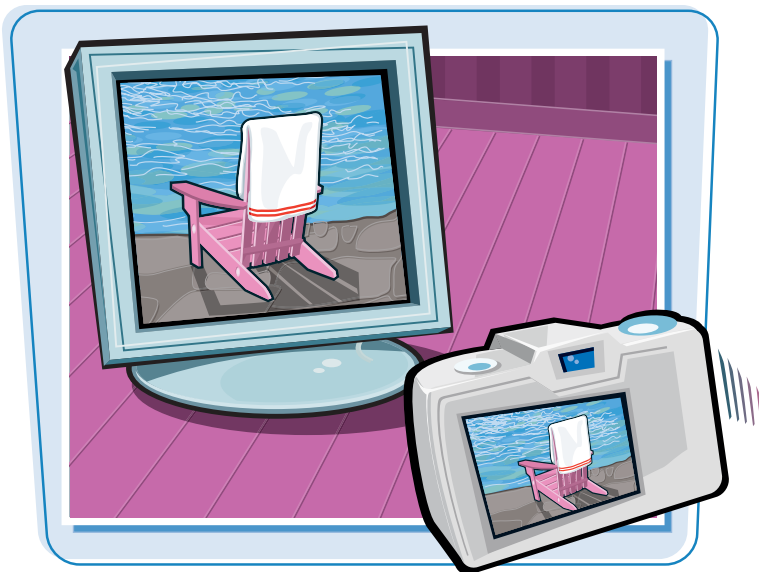
Lightroom helps you develop your photos in the digital darkroom. Lightroom's interface lets you focus directly on the image as you work, just as you would in a traditional darkroom. Because you edit the images based solely on what you see on the screen, a good quality and well-calibrated monitor is the most important tool for processing photographs with Lightroom.



Focus on Your Monitor.....	134
Understanding Monitor Calibration Options	136
Calibrate and Profile Your Monitor.....	138

Focus on Your Monitor

Everything starts with your monitor. Your camera captures the data and your monitor displays it as a photograph. You make decisions on the quality of the photo and make adjustments to the colors and tone based on the colors and tone you see on the monitor. If your monitor displays inaccurate colors, your images cannot be viewed accurately.



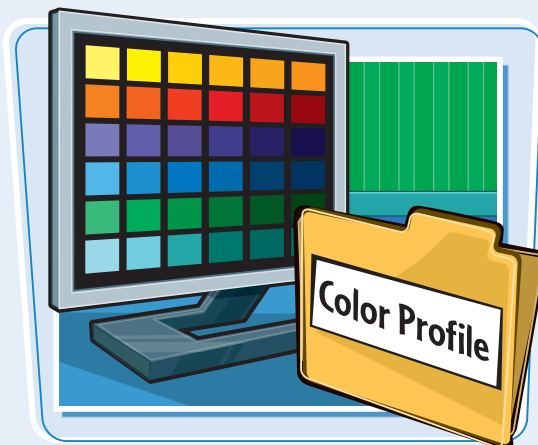
Quality of Monitor

Because you cannot enhance what you cannot see correctly, the monitor is the most important piece of computer hardware for judging and editing photos. Unlike a TV, you sit very close to the monitor to analyze details and colors. Use a high-quality monitor with sharp details, uniform brightness, and image stability to help you see the image clearly and avoid eyestrain.



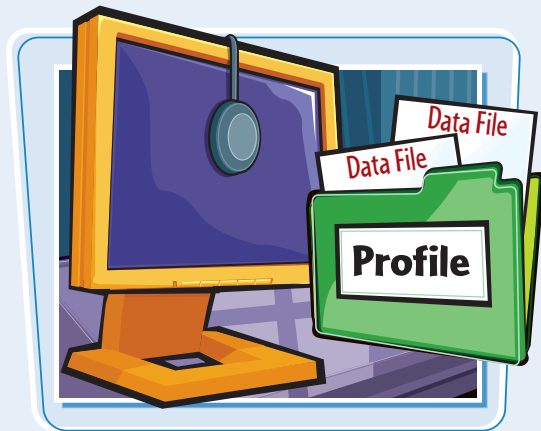
Monitor Calibration and Profiling

All monitors require regular calibration and profiling. Each monitor is different from every other one, including the same model and brand, and each interacts differently with your computer's specific video card. Even a brand-new monitor straight out of the box must be calibrated and have a profile created to more closely display the colors and tone captured by your camera.



Monitor Calibration Defined

Monitor calibration refers to the measurement by an external hardware device of the colors a particular monitor displays as compared to an established ICC, International Color Consortium, standard for those colors.

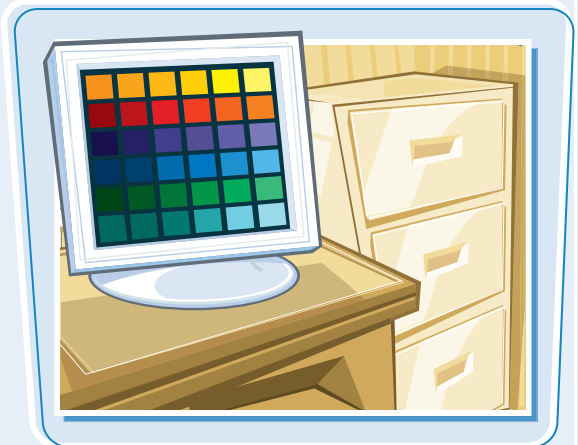


Monitor Profiling Defined

Profiling software analyzes the colors recorded by the measurement device and creates a data file or set of instructions called a *profile*. Your computer's graphics card then uses the new profile to adjust the monitor so it displays the colors closer to the ICC standards.

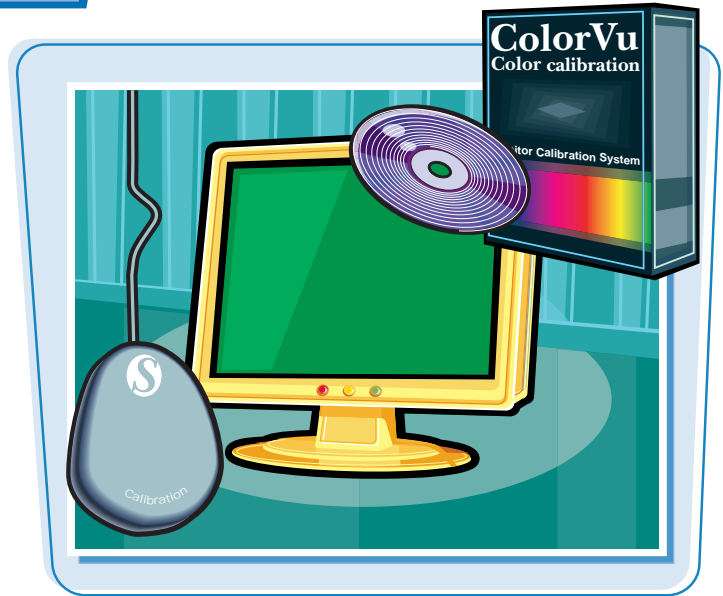
More Viewing Considerations

The area surrounding the monitor should be free of bright colors and lights that reflect in the screen or cause glare, both when you calibrate your monitor and view your photos. Even the viewer's clothing should be as neutral in color as possible, because what you are wearing reflects directly in the monitor and can affect your visual perception.



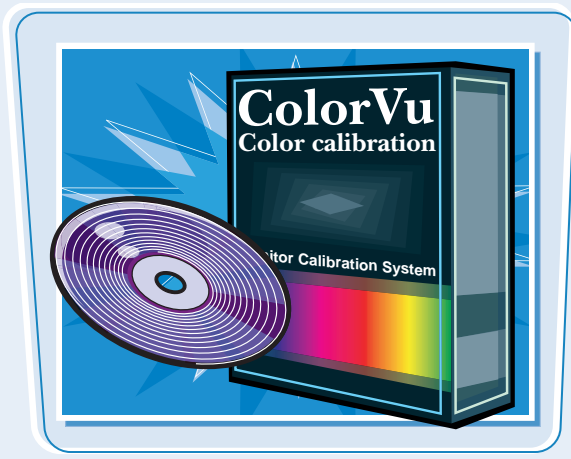
Understanding Monitor Calibration Options

Although the operating system generally includes a software monitor calibration option and Adobe Photoshop includes the Gamma application, these visually controlled monitor calibration options are totally subjective and depend on the color sense of the user. The best and most accurate way to calibrate and profile a monitor is using an external hardware device and its specific software.



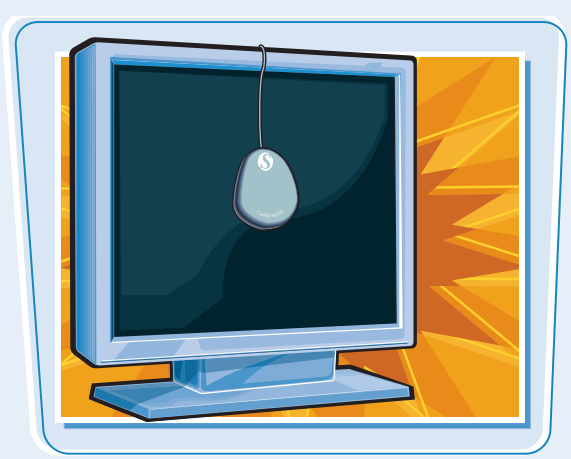
Software-Only-Based Monitor Calibration

Using the operating system to calibrate your monitor and create a profile is better than no calibration at all. However, the results vary with the color sense of the user. This software asks you make adjustments according to what you see on the screen. It cannot actually measure how your monitor is emitting the light.



Hardware-Based Monitor Calibration

Using a hardware device, your monitor can be more accurately calibrated. A *colorimeter* measures the colors shown on the monitor. A *spectrophotometer* has more options and can also measure the colors produced by other devices, including a printer; you can also use the spectrophotometer to create color profiles for your particular printer using specific papers and inks.



Hardware Calibration Devices

Various vendors including Datacolor and X-Rite make monitor calibrating hardware and profiling software such as the Spyder3, hueyPRO, i1Display, ColorMunki, and i1Photo. The entry-level devices include basic measurement and profiling software, and the more advanced units include profile editing plus digital camera and scanner profiling.



hueyPRO Colorimeter

Designed for all types of monitors, both CRT and LCD, the Pantone X-Rite hueyPRO colorimeter offers basic monitor calibration and profiling software and also measures the ambient light levels around the monitor, adjusting the display in response to changing room brightness.

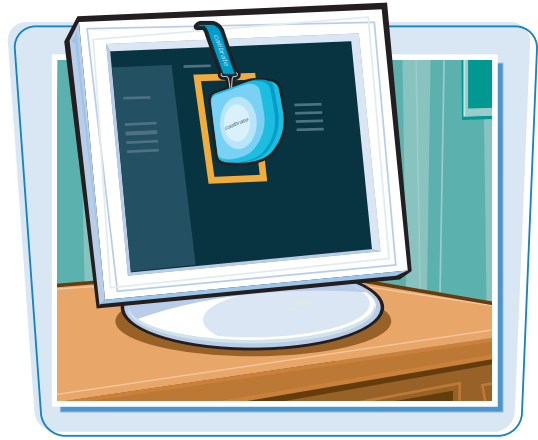
ColorMunki

X-Rite's ColorMunki Photo is a spectrophotometer specifically designed for the digital photographer. The ColorMunki measures the ambient light levels and can calibrate your monitor, printer, or even a projector.



Calibrate and Profile Your Monitor

Using a device such as the ColorMunki makes monitor calibration and profiling very quick. Using the easy mode, you select the display type, set the device on the screen, and follow the on-screen steps. You can also use the advanced mode to specifically regulate the brightness and contrast settings and other settings for your specific monitor.



Calibrate and Profile Your Monitor

Note: The following steps show how to use the ColorMunki Photo in advanced mode. Most other devices use similar steps.

CALIBRATE THE MEASURING DEVICE

- 1 With the device software installed, launch the ColorMunki application.
- 2 Click **Profile My Display**.
- 3 Click your monitor type (☐ changes to ☐).
- 4 Click **Advanced** (☐ changes to ☐).
- 5 Click the **Target White Point for display** ▾ and click **D65 (default)**.
- 6 Click **Next**.



- 7 Connect the device with the USB cable if necessary.
- 8 Rotate the dial to the calibrate device setting.
- 9 Click the button on the device to calibrate it.
- 10 Click **Next**.



MEASURE THE AMBIENT LIGHTING

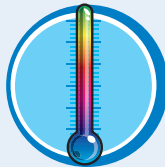
- 1 Place the ColorMunki next to the monitor.
- 2 Click **Measure**.
- 3 When the green check mark appears, click **Next**.



TIPS

What is the best color temperature to use for my monitor for viewing photographs?

6500K (or D65) (see Step 5) is considered a good choice. Video cards and monitors are often preset to 9300K, which gives a bluish tint to everything. 5000K approximates sunlight and is the color of lighting in art galleries; however, it often produces dingy, yellowish white colors on monitors. For LCDs, use the native white point if possible to display the widest color range on this type of monitor.



What Gamma setting should I use?

A monitor's *gamma* refers to the contrast in the midtones it produces. If possible, use the monitor's native gamma, which allows for the maximum range of colors your system can display. For most monitors the native gamma is 2.2.

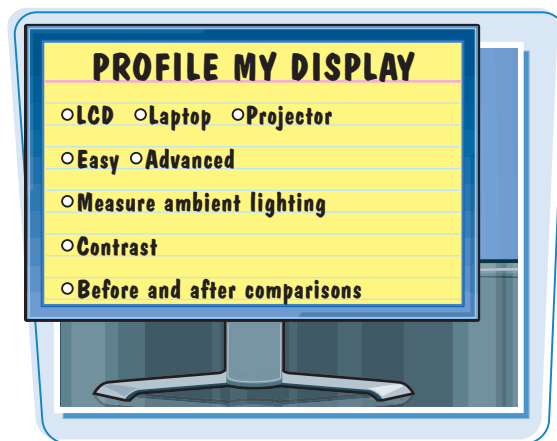


continued

Calibrate and Profile Your Monitor (continued)

Color temperature describes the color of light in terms of the temperature of the light source. The color temperature of the display changes the appearance of the image. At 9300K the light appears more bluish-green. At 5000K and below, the light appears more yellow-red.

White point for a monitor combines the color temperature of the light source with the intensity of the brightest white the monitor can reproduce.



Calibrate and Profile Your Monitor (continued)

MEASURE AND CALIBRATE YOUR MONITOR

1 Turn the device dial to the measure position with the beam pointing up.

2 Click **Next**.

A yellow box appears in the application window.

3 Place the ColorMunki in its holder and place it directly over the yellow box on the screen, hanging the lanyard off the back of the monitor.

4 Click **Next**.

The Contrast setting box appears.

5 Follow the instructions to adjust the contrast on your display if possible.

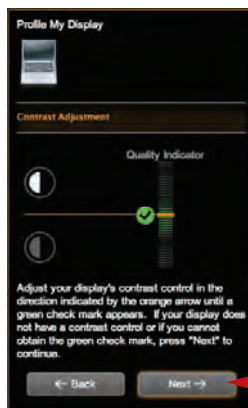
6 Click **Next**.

The Contrast Adjustment box appears.

7 Follow the instructions to adjust the contrast until the green check mark appears.

8 Click **Next**.

9 Repeat Steps 7 and 8 to adjust the Brightness.

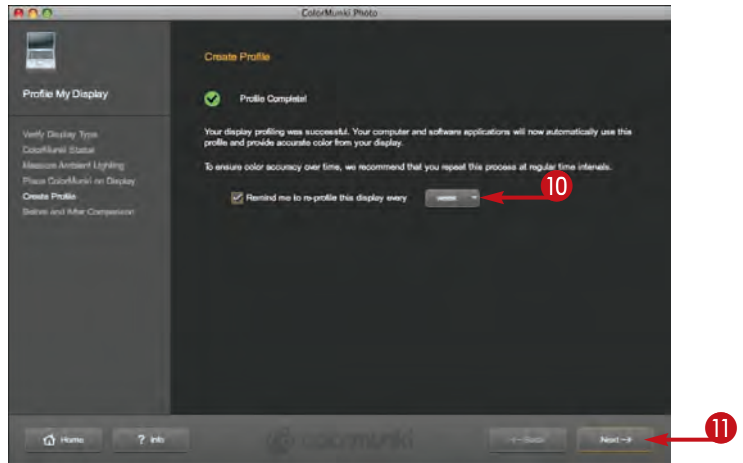


The monitor displays a series of full-colored screens as the device measures all the colors.

Another screen appears showing the profile complete.

- 10 Click the **Remind me to re-profile this display every** and select **week**.

- 11 Click **Next**.



A Before and After Comparison screen appears.

- 12 Click the **Before** button and then the **After** button to compare the results.

- 13 Click **Next** to complete the process.



TIPS

What do the black and white levels refer to?

Black levels correspond to the monitor's brightness, and white levels correspond to the contrast values. The calibration software guides you and displays a green check mark when the optimum levels are set. In general, the brightness should be set so almost black is just distinguishable from pure black. The contrast should be set so that fine details are not blown out.



How often do I have to calibrate and profile my monitor?

You should calibrate and profile more frequently as the monitor ages. Consider calibrating and re-profiling once a week for photographic use depending on the age of your monitor. LCDs generally retain their color fidelity longer than CRTs, which are considered old after 3 years. However, even an older monitor's color display can be somewhat revived or improved by calibration and profiling.



CHAPTER

6

Using the Library Module for Quick Developing



The Library module not only contains all the tools for organizing, categorizing, and sorting your photos, it also includes some quick develop tools. You can use these tools to easily judge the editing possibilities and quality of your photos without going into the full Develop module.

Understanding the Histogram	144
Alter the Photo with a Preset.....	146
Crop Your Photo with a Preset.....	147
Make a Quick Change to Grayscale	148
Quickly Select a Different White Balance	149
Fine Tune the White Balance Setting	150
Modify an Auto Tone Change.....	152
Understanding Library Module Clarity and Vibrance Tools	154
Improve the Photo with Clarity and Vibrance	155
Synchronize a Quick Develop Setting for Multiple Images	156
Create Virtual Copies to Compare Edits	158

Understanding the Histogram

Lightroom includes a histogram in both the Library and Develop modules. In the Library module, the histogram functions as a guide to viewing and enhancing your photos. In the Develop module, the histogram functions as both a guide and a tool to help you adjust overall tones in your images. Understanding what the histogram shows is essential to editing photos.



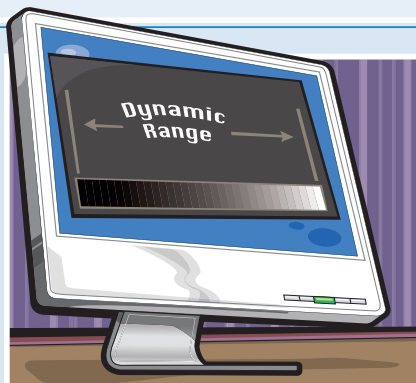
What Is a Histogram?

A *histogram*, whether on the back of your camera or in Lightroom or Photoshop, is a graph that displays the overall distribution of tonal levels in the image, from the darkest to the lightest levels. The histogram acts as a guide, showing the kind of exposure and the amount of contrast, and can help you determine which adjustments to use to best improve your photo. Each photo is different, and the histogram of a good image does not necessarily spread completely across the graph.



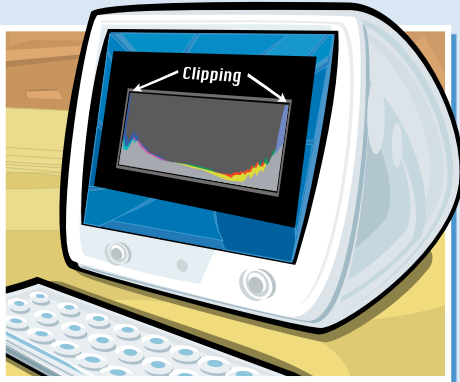
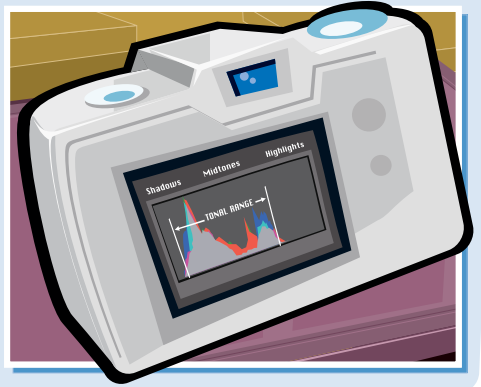
Dynamic Range

Dynamic range describes the ratio between the measurable intensity of the darkest and the lightest areas that can be seen by the human eye, captured by a camera sensor, displayed on a monitor, or printed by a printer, and each specific device has its own dynamic range. A camera sensor can capture greater dynamic range than what a monitor can display or a printer can print.



Tonal Range

Tonal range and dynamic range are related. The histogram is a graph of all the tones in the image, ranging from the darkest on the left to the lightest on the right. The tonal range is the region on the histogram where most of the brightness values appear.

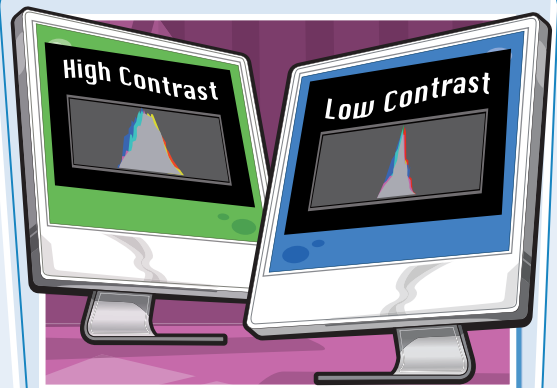


Clipping

Clipping occurs when areas of the image have no shadow or highlight detail and are either totally black or totally white. Clipped areas appear in the histogram as areas going up and off the right or left side of the chart. The Develop module's histogram includes a preview function so you can see exactly the areas in the photo that are clipped.

Contrast

Contrast is the difference in the extremes of brightness between the light and dark areas in a photo. A high-contrast image shows deeper shadows and brighter highlights than a low-contrast image. The histogram for a high-contrast image has wider mountain peaks than those in the histogram of a low-contrast image. A photo can have areas of both high and low contrast.



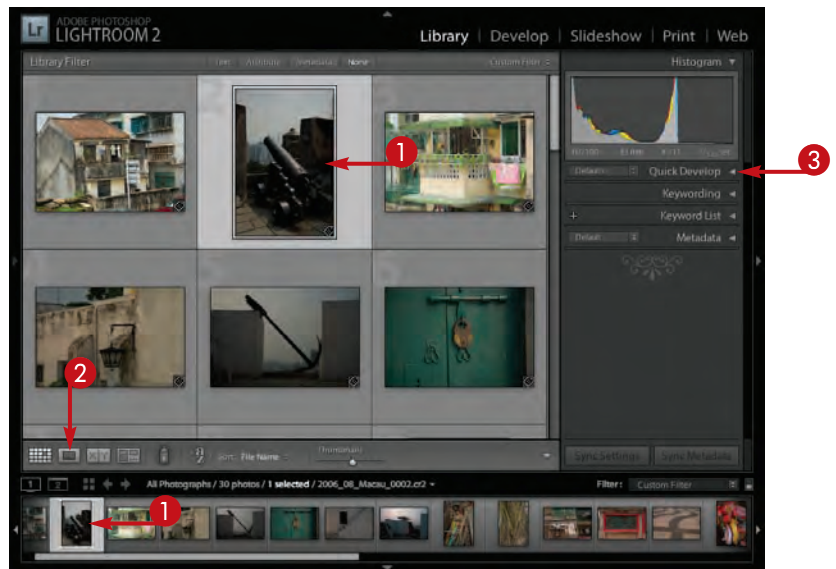
Alter the Photo with a Preset

The Quick Develop options in the right panel of the Library module include a number of presets you can use to easily change the look of your photograph with one click. These presets are a quick way to see how an ordinary image might be improved.



Alter the Photo with a Preset

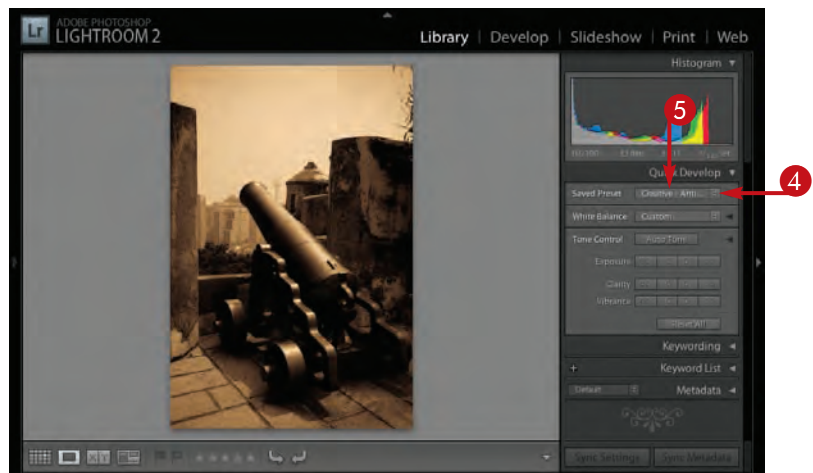
- 1 In the Library module, click a photo in the grid or the Filmstrip.
 - 2 Click **Loupe View** (🔍).
- Note: Alternately, press **E**.*
- Note: Click **F7** to hide the left panel.*
- 3 Click the **Quick Develop** (⏏).



The Quick Develop pane expands.

- 4 Click the **Saved Preset** (📁).
 - 5 Click a preset.
- The settings, Creative Antique in this example, are applied to the image.
- 6 Repeat Step 5 to try any of the other presets.

Note: If you click multiple presets in the order in which they are listed, the effects are compounded.



Crop Your Photo with a Preset

chapter 6

You can crop photos in the Library module using the Quick Develop crop ratios. You can use any of the preset crop ratios listed or you can enter a custom crop ratio. The preset crop ratios always crop the photo from the center.

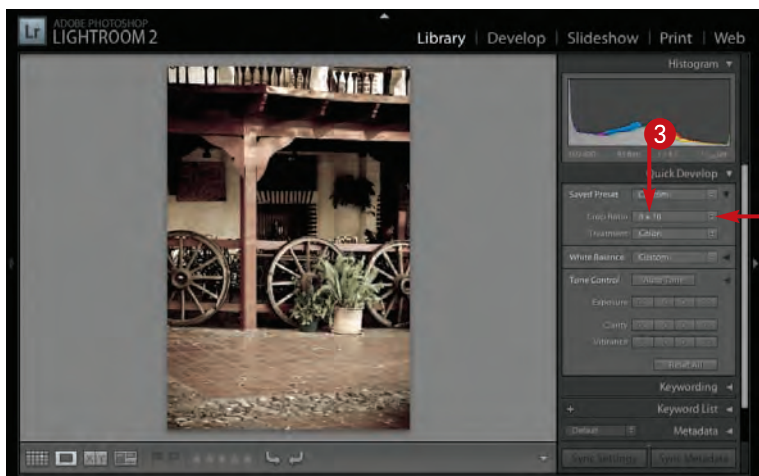


Crop Your Photo with a Preset

- 1 Repeat Steps 1 to 3 from the previous task.

Note: Optionally, click **F** twice to see the full screen.

- 2 Click the **Crop Ratio** .
- 3 Click a preset ratio.



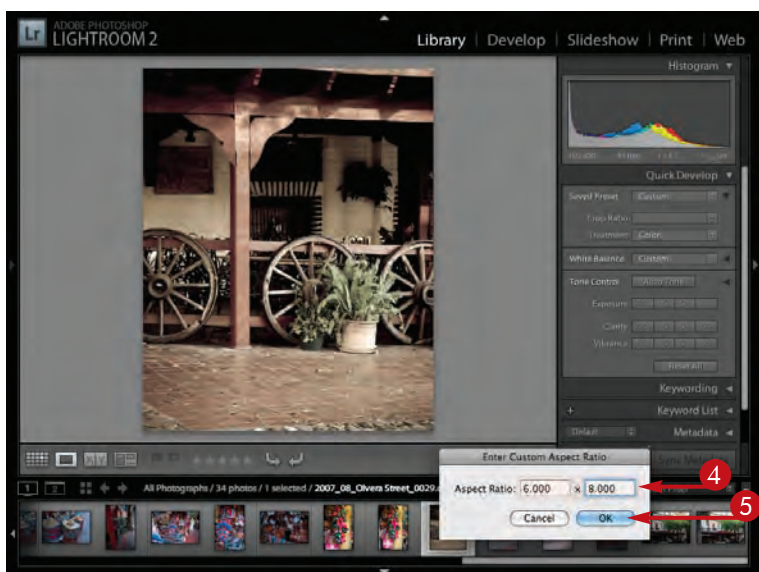
The image is cropped from the center to the preset crop ratio.

Note: Optionally, in Step 3, click **Enter Custom**.

The Enter Custom Aspect Ratio dialog box appears.

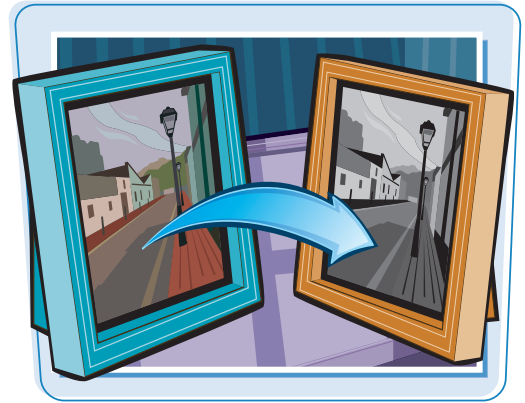
- 4 Type the desired ratio in each box.
- 5 Click **OK**.

The new crop ratio is saved and appears in the Crop Ratio menu.



Make a Quick Change to Grayscale

In addition to selecting a Black and White preset, you can quickly change a color photo to grayscale by applying a grayscale treatment in the Library module. You can quickly see if the grayscale image has more impact than the color photo.



Make a Quick Change to Grayscale

- 1 Repeat Steps 1 to 3 from the “Alter the Photo with a Preset” task.
- 2 Click the **Treatment** icon.
- 3 Click **Grayscale**.



The color photo appears in grayscale.

- 4 Click **Reset All**.

The photo reverts to the original settings.



Quickly Select a Different White Balance

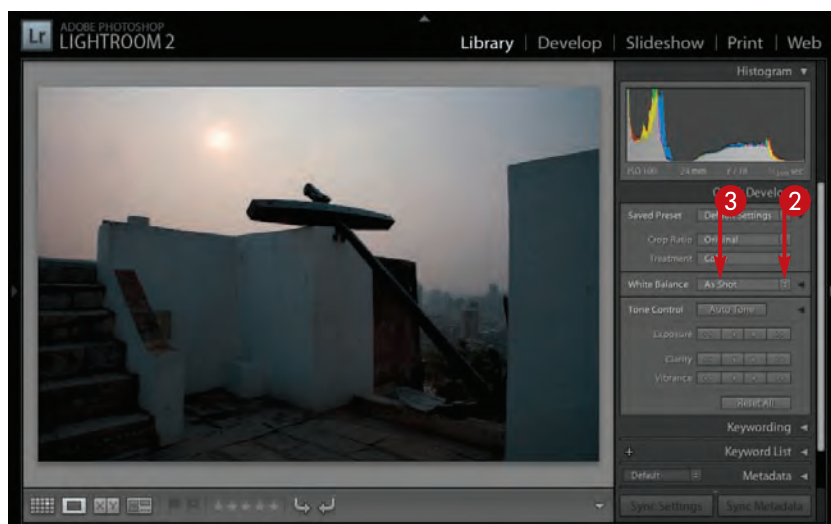
chapter 6

Whether you used the automatic white balance of the camera or set a custom one, you can select a different white balance in Lightroom to quickly see how it will alter your photo. You can easily compare the various options and also use this comparison as a learning tool to improve your photography in general.



Quickly Select a Different White Balance

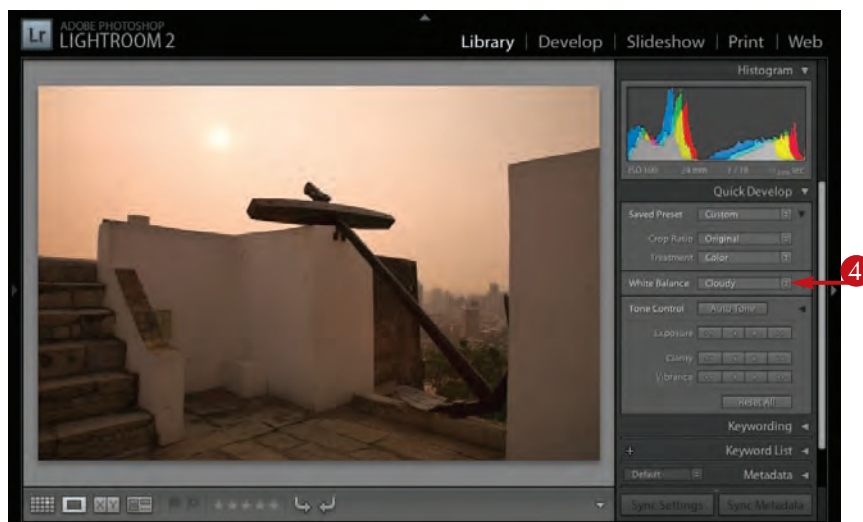
- 1 Repeat Steps 1 to 3 from the "Alter the Photo with a Preset" task.
- 2 Click the **White Balance** icon.
- 3 Click a different white balance from the menu.



The new white balance is applied to the photo.

- 4 Repeat Step 3 until you find a setting you like for that photo.

Note: If you import JPGs rather than RAW photos, your choices are Auto, As Shot, and Custom.



Fine Tune the White Balance Setting

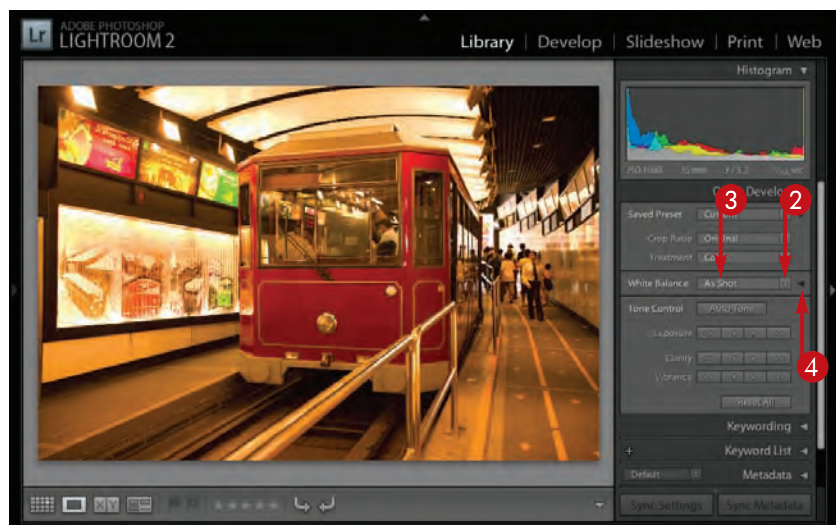
An incorrect white balance setting in a camera can produce a color cast, giving the photo an overall blue, orange, or green appearance. You can make refined adjustments to the Temperature and Tint of the white balance, especially for RAW files while in the Library module.



Fine Tune the White Balance Setting

CHANGE THE WHITE BALANCE SETTINGS

- 1 Repeat Steps 1 to 3 from the "Alter the Photo with a Preset" task.
- 2 Click the **White Balance** icon.
- 3 Click a different white balance from the menu.
- 4 Click the **White Balance** icon.



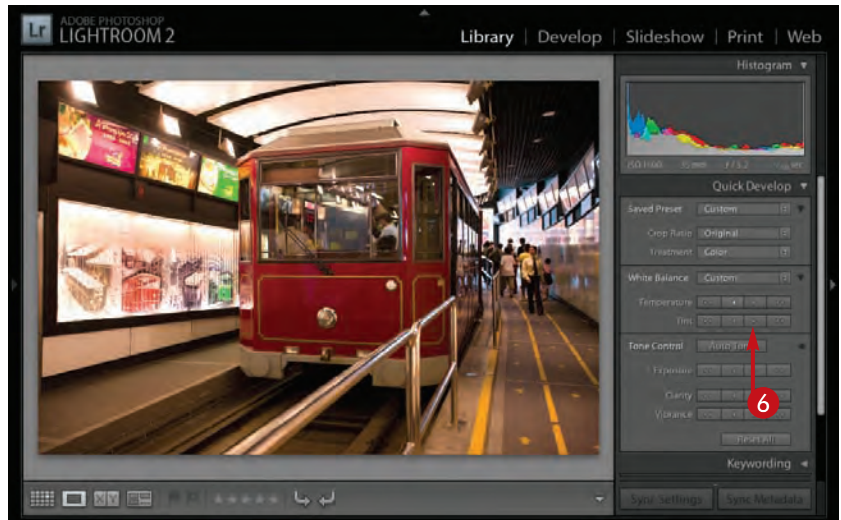
The White Balance pane expands.

- 5 Click the **Temperature** icon or icon to make the photo cooler, or icon or icon to make the photo warmer.

Note: The icon and icon make a much greater correction with one click than icon and icon.



- 6 Click the **Tint** >> or > to add more magenta to the tint, or << or < to add more green to the tint.



REVERT THE WHITE BALANCE SETTINGS

- 1 Click the **White Balance** [WB] icon.
 - 2 Click **As Shot**.
- Click **Reset All** to revert all the settings in the Quick Develop pane.



TIPS

Why is there a color cast in my photo?

All light sources have different color temperatures, which can lead to these color casts. Although the human eye sees white as white under varying lighting conditions, the camera sees the color of the light reflected from the white item. Digital cameras include a number of presets you can use to set a white balance based on the color temperature of the light source, and advanced cameras include a custom option.



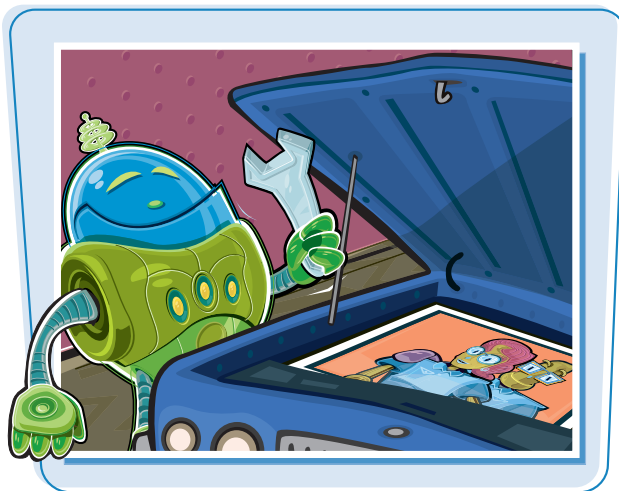
How do I set the Custom White Balance on my camera?

Take a full-frame photo of a known reference card, such as the ColorChecker card from xrite.com or a WhiBal card from rawworkflow.com, in the same lighting as your subject. You can also use an ExpoDisc from expodisc.com, as a custom lens filter, and take a photo to capture the incident light in the scene. You then set that photo as the custom white balance according to the individual camera manufacturer's instructions.




Modify an Auto Tone Change

The Auto Tone setting in the Quick Develop pane tries to correct the exposure by extending the dynamic range of the image without clipping the highlights or shadows. Depending on the image, Auto Tone may make the photo appear overexposed. You can then refine the Auto Tone setting using the rest of the tools in the expanded Tone Control section.



Modify an Auto Tone Change

1 In the Library module, click a photo in the grid or the Filmstrip.

2 Click  to go to Loupe view.

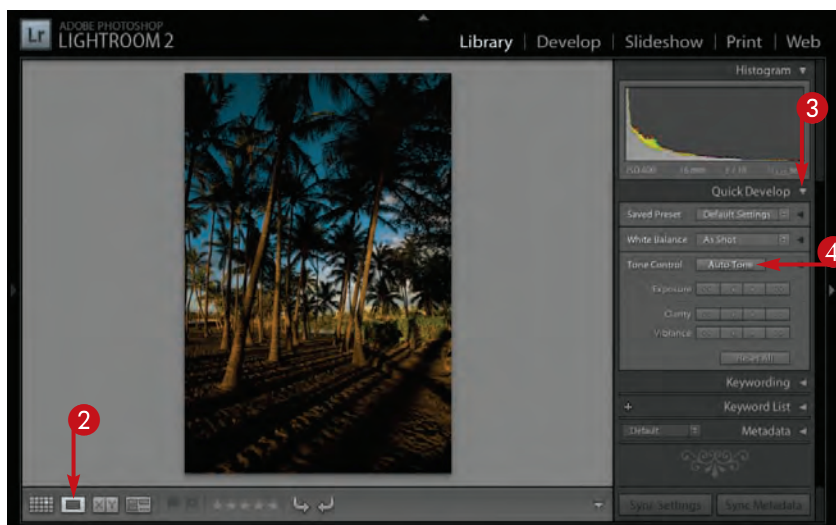
*Note: Alternately, press **E**.*

*Note: Click **F7** to hide the left panel.*

3 Click the **Quick Develop** .

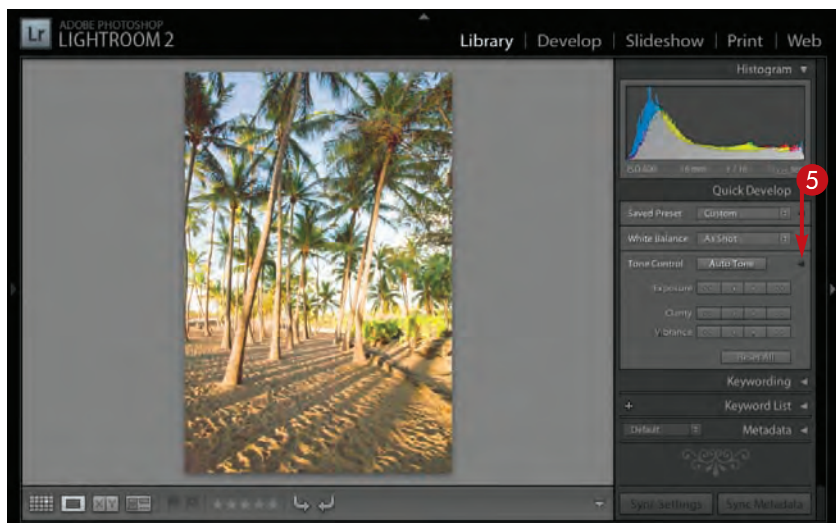
The Quick Develop pane expands.

4 Click **Auto Tone**.



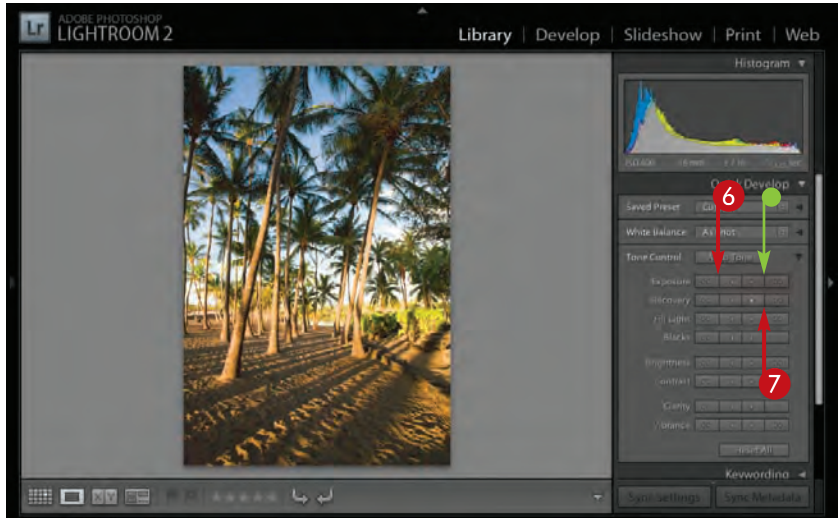
The image changes.

5 Click the **Tone Control** .

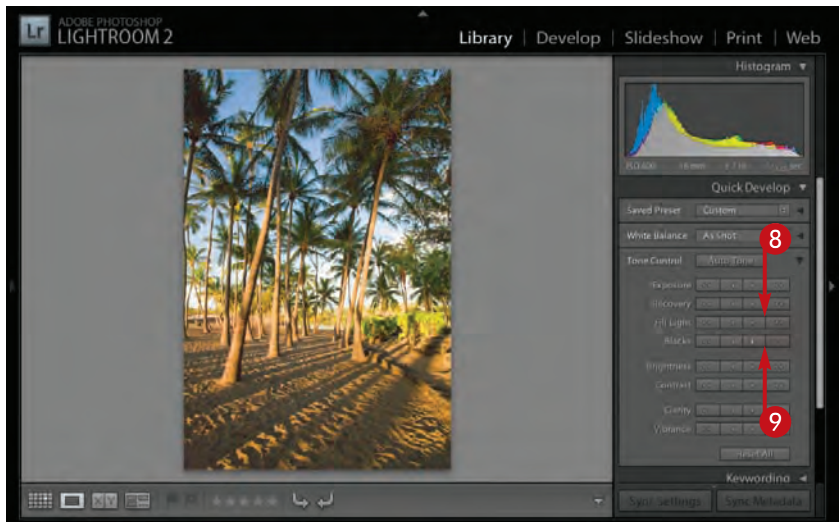


The Tone Control pane expands.

- 6 Click the **Exposure** << or >> to decrease the exposure.
- 7 Click the **Exposure** >> or >> to increase the exposure.
- 7 Click the **Recovery** >> or >> to recover lost highlights.



- 8 Click the **Fill Light** >> or >> to lighten the darkest shadow areas.
- 9 Click the **Blacks** >> or >> to increase the depth of the dark areas.



TIPS

What do the Recovery and Fill Light options do?

Clicking the right **Recovery** arrows (>> and >>) helps bring back details in the highlights without blocking up the shadow areas. Clicking the right **Fill Light** arrows (>> and >>) adds light to the shadow areas without lightening the entire image. Using too much Fill Light adds noise to the dark areas.



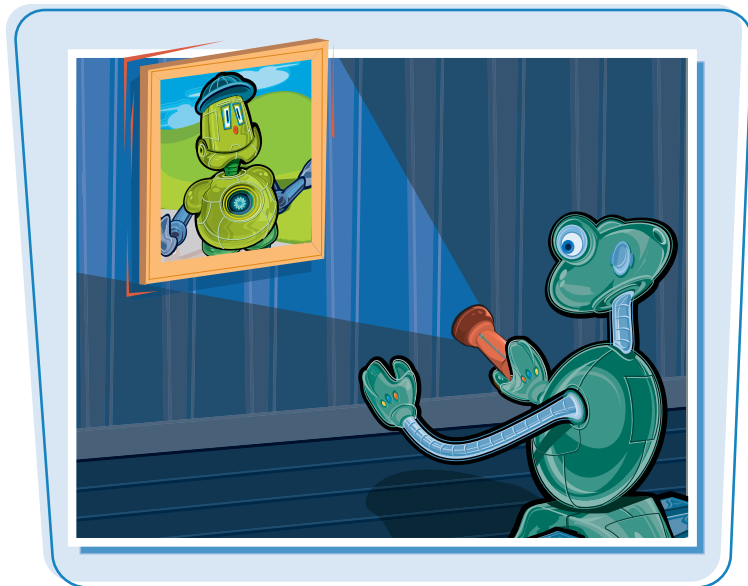
What kind of change is made to the exposure by clicking the single or double arrows?

Clicking the single arrows (<< and >>) decreases or increases the exposure by 1/3 exposure stop. Clicking the double arrows (<<< and >>>) decreases or increases the exposure by 1 full exposure stop. For the other controls, the single arrows increase the values by 5 steps and the double arrows by 20 steps.



Understanding Library Module Clarity and Vibrance Tools

The lower portion of the Tone Control pane includes adjustments that mainly affect the midtones in the photo. Adding Brightness increases the brightness of the image. Increasing Contrast darkens the middle-to-dark areas and lightens the middle-to-light areas. Although Clarity is related to Contrast, and Vibrance is similar to Saturation, they differ in the way they affect the image.



Clarity

Clarity is an adaptive midtone contrast adjustment, which should be applied when zoomed in at 100%. Clarity increases the contrast by carefully sharpening mainly the midtones and helps give the image a dramatic look. It even seems to minimize the noise that would be visible with standard digital sharpening. Using the Clarity tool, you can add contrast in a subtle way to improve your photo.



Vibrance

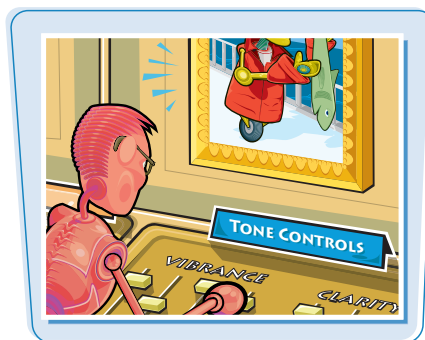
Increasing Vibrance, like increasing Saturation, intensifies the colors in the image. However, although Saturation adjusts the intensity of all the colors of the image, Vibrance affects the less-saturated colors and minimizes any effect on the more saturated areas in the photo. Vibrance also helps avoid oversaturated skin tones.



Improve the Photo with Clarity and Vibrance

chapter 6

You can best adjust your photo by using all the tone controls in the Quick Develop pane. Change the White Balance first and then adjust the tone controls in the order in which they appear. You can always readjust them after setting the Clarity and Vibrance. The Clarity is best adjusted when viewing the image at 100% or greater.

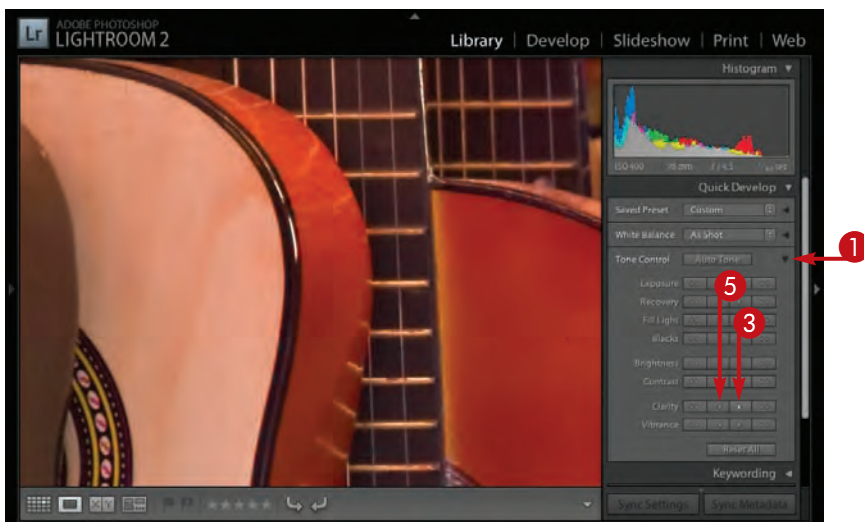


Improve the Photo with Clarity and Vibrance

- 1 Click to open the Tone Control pane.

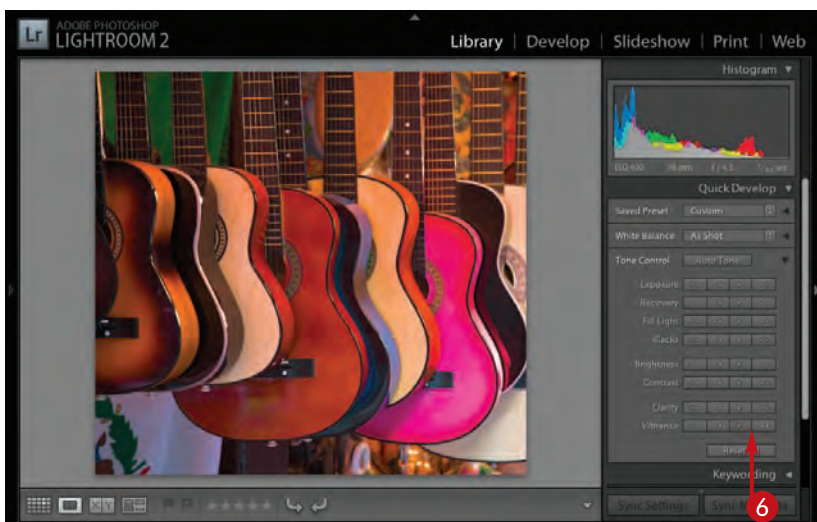
Note: Press **F7** to hide the left panel.

- 2 Press **Z** to zoom to 100%.
- 3 Click the **Clarity** or to increase the clarity.
- 4 Repeat Step 3 until you see white fringes, referred to as *halos*, on the edges of contrasting areas.
- 5 Click the **Clarity** until the halos just disappear.



- 6 Click the **Vibrance** or to increase the vibrance of the midtones.
- 7 Press **Z** to fit the photo in the view.
- 8 Repeat Step 6 as needed until the image looks pleasing.

Note: To reset just the Clarity or just the Vibrance back to zero, click the word **Clarity** or the word **Vibrance**. To reset the photo to the original, click **Reset All**.



Synchronize a Quick Develop Setting for Multiple Images

You can apply changes to multiple photos at once by first selecting them in the Grid mode, and then clicking the settings in the Quick Develop pane. You can also make changes to one photo and then select others and synchronize the settings across the other images.

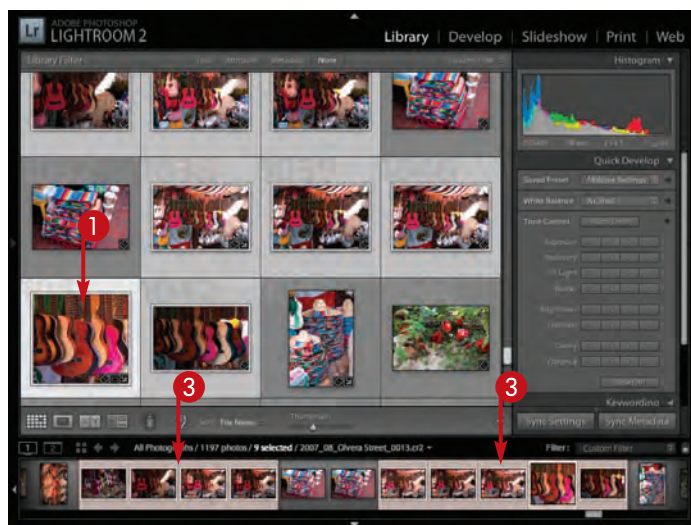


Synchronize a Quick Develop Setting for Multiple Images

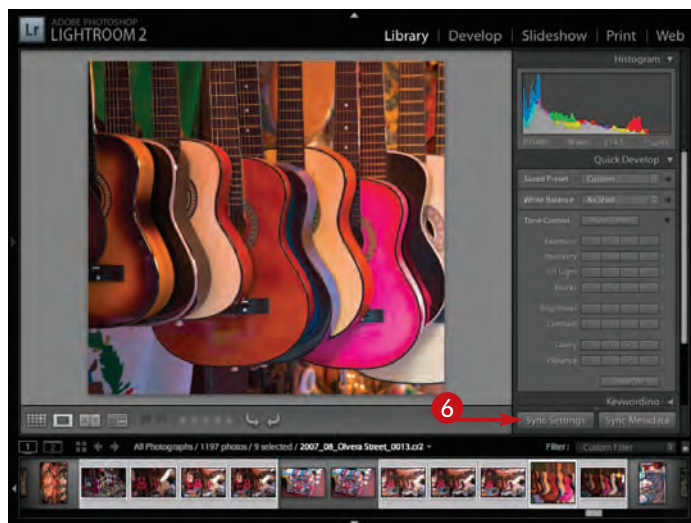
- 1 Click one photo in the grid to select it.

Note: Press **F7** to hide the left panel.

- 2 Make changes to the photo using the settings in the Quick Develop pane.
- 3 **⌘**+click (**Ctrl**)+click other photos in the Filmstrip or grid to select them.

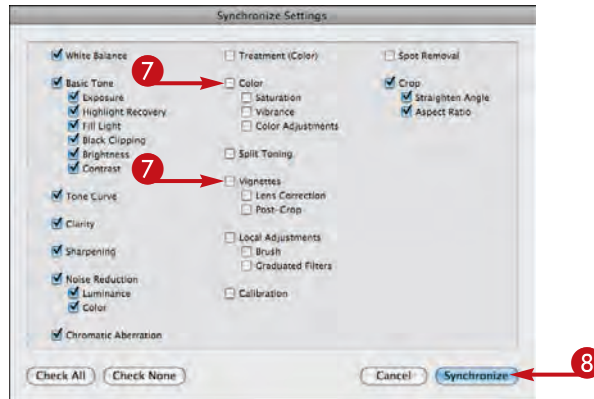


- 4 Press **E** to make sure the photo in the Loupe view is the base photo.
- 5 Press **G** to return to the Grid mode.
- 6 Click **Sync Settings**.



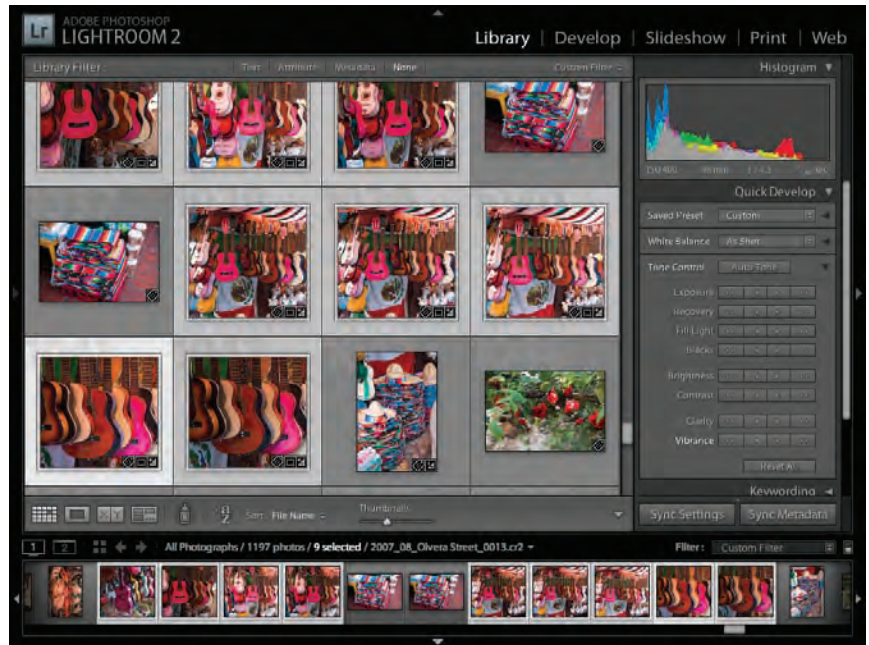
The Synchronize Settings dialog box appears.

- 7 Click the check boxes of any settings you do not want to apply to all the selected photos (☐ changes to ☒.
- 8 Click **Synchronize**.



The selected Quick Develop settings are applied to all the images.

Note: To remove the settings from all but the base photo, press **⌘ + Z** (**Ctrl + Z**).



TIPS

With multiple images selected, how do I know which photo's settings will be applied to the others?

Settings are copied from the base photo, the first image you selected. This is the *most selected* photo with the brightest outline area in the Filmstrip or grid. The most selected photo appears in the viewing area in the Loupe view. Press **E** to go to Loupe view to check. Press **G** to return to the Grid view.



Why does the Quick Develop pane not include Sharpening and Saturation settings?

Actually it does. You can change the Sharpening and Saturation in the Quick Develop pane by pressing the **Option** (**Alt**) key. The Clarity and Vibrance options change to Sharpening and Saturation.



Create Virtual Copies to Compare Edits

You can compare several versions of the same image with different edits applied by creating virtual copies in the Library module. Virtual copies are not copies of the photo but rather a second set of data instructions for viewing the image. You can create virtual copies before applying any develop settings and use the Survey mode to compare all the variations.



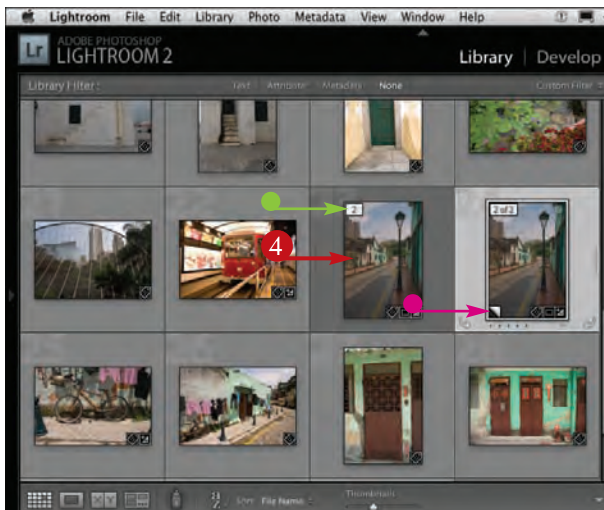
Create Virtual Copies to Compare Edits

- 1 Click a photo to select it.
- 2 Click **Photo**.
- 3 Click **Create Virtual Copy**.



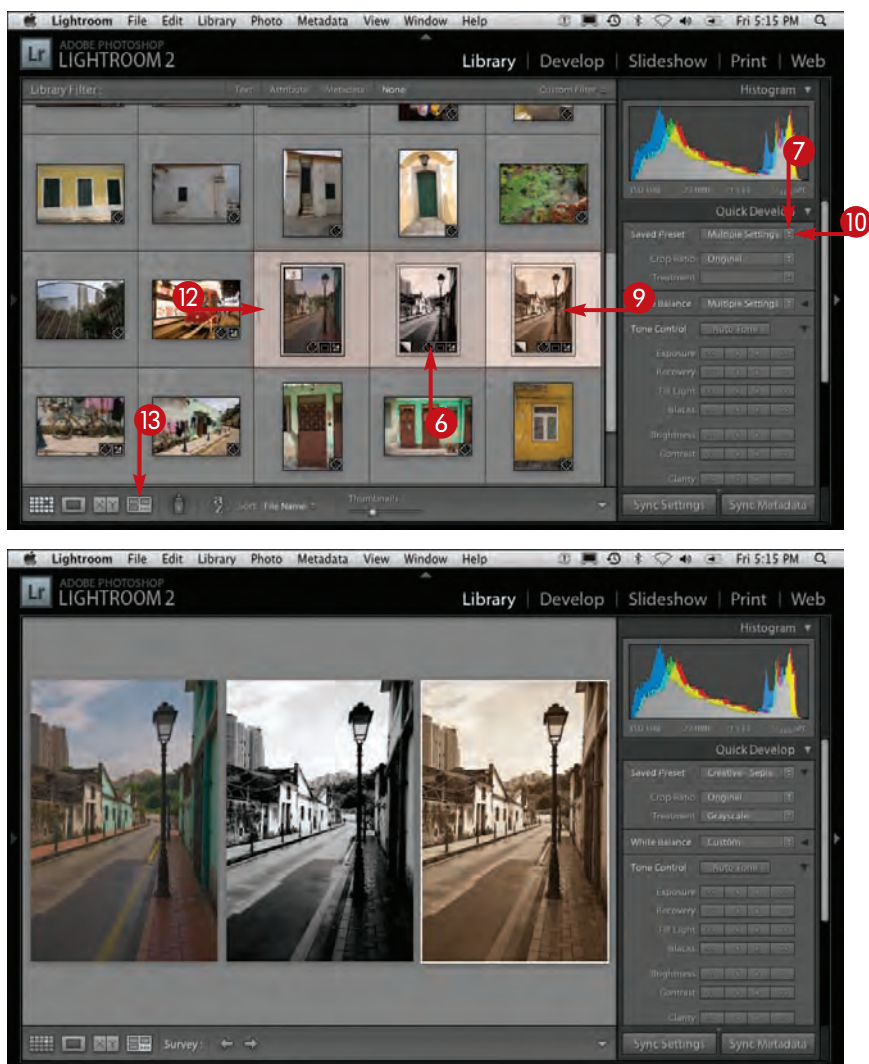
Lightroom makes a virtual copy and stacks it with the master photo.

- The master photo shows the number of photos in the stack.
 - The virtual copy appears with a page-turn icon on the lower left corner of the photo.
- 4 Click the master photo.
 - 5 Repeat Steps 2 and 3 to create another virtual copy.



- 6 Click the first virtual copy.
- 7 Click the **Saved Preset**.
- 8 Click **BW High Contrast**.
- 9 Click the second virtual copy.
- 10 Click the **Saved Preset**.
- 11 Click **Creative – Sepia**.
- 12 +click (**Ctrl**+click) the three photos to select them.
- 13 Click **Survey View**.

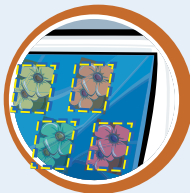
The master photo and two virtual copies with different adjustments appear in the Survey view.



TIPS

Does a virtual copy take up more room on my hard drive?

Virtual copies are not duplicate files, so they do not take up more room on your hard drive. You can make as many virtual copies of one master photo as you want.



What else should I know about virtual copies?

- When you export a virtual copy it becomes a separate file.
- You can set the virtual copy to be the master photo by clicking **Photo** and selecting **Set Copy as Master**.
- You can create virtual copies in any module by **Control**+clicking (right-clicking) the photo in the Filmstrip and selecting **Create Virtual Copy**.



CHAPTER

7

Exploring the Develop Module



Although Lightroom's Library module includes some limited image editing functions, the Develop module acts as a full digital darkroom. In this module you can crop and straighten images, edit exposure and tone, improve colors, enhance the contrast, add vignettes and sharpening, and more.

Locate the Parts of the Develop Module....	162
Change the Develop Module Interface	164
Try the Develop Module Shortcuts	166
Using the Develop Module Presets	168
Compare Images in the Develop Module....	170
Using the Image History and Snapshots	172
Rotate a Photo in the Develop Module	176
Copy and Paste Edits from One Photo to Another.....	177
Using the Histogram Features in the Develop Module	178
Straighten Images	180
Recompose Your Photo with a Crop.....	182
Creatively Crop an Image for Effect	184
Repair Dust Spots and Other Imperfections.....	186
Remove Red Eye	188

Locate the Parts of the Develop Module

The Develop module is used for processing photos. As with a traditional darkroom, you work on your images in the Develop module to create the best negative from your shots. Learning where to find the tools and how to use them is essential to convenient digital photo editing.



● Develop Module left panel

Navigator section

The Navigator provides a preview of the image with presets applied and offers specific zooming options

Presets Section

All the Lightroom default presets are listed along with any presets you create and name.

Snapshots section

You can create any number of snapshots to save a specific set of applied steps.

History section

History lists all the recorded edits you have applied.

● Copy and Paste buttons

You can copy and paste Develop settings from one photo to another.

● Develop Module central viewing area (Loupe view)

The main viewing area shows a large single image or a Before and After view for edit comparisons.

● Develop Module toolbar

The toolbar includes the view mode options and any of the flagging, rating, labeling, navigating, slide show, and zoom tools you add to it.

● Develop Module right panel

Histogram

The Develop histogram shows a graphical representation of the color and tonal values in the selected image. You can adjust the tones in the image by clicking and dragging directly on different areas of the histogram. You can adjust the Blacks, the Fill Light, the Exposure, and the Recovery as you move the cursor from left to right over the histogram.

● Adjustment tools

Clicking any tool icon expands the section to reveal the controls for specific area editing. From the left:

- Crop tool (📏)
- Spot Removal tool (👉)
- Red Eye Correction tool (👁)
- Graduated Filter (📏)
- Adjustment Brush (🖌)

Basic Adjustments section

The Basic section expands to change the white balance, exposure, and more tonal controls.

Tone Curve section

You can adjust the tonal curve three ways: by moving the descriptive sliders, by clicking and dragging on the curve itself, or by clicking and dragging directly on the image using the Target Adjustment tool.

HSL/Color/Grayscale section

The section expands for three different types of color adjustments, or you can view all three at once by clicking **All**.

Split Toning section

Enables separate controls over the tones in the highlights and shadows.

Detail section

Includes a 100% sectional view and three details adjustments including Sharpening, Noise Reduction, and Chromatic Aberration

Vignettes section

Enables you to add, alter, or remove a vignette on the photo.

Camera Calibration section

Allows you to change the default color response for the specific camera you used or import a custom calibration.

● **Previous and Reset buttons**

You can go back to the previous settings applied or reset the photo back to its original. With multiple photos selected, the Previous button changes to the Sync button for synchronizing settings across multiple images.

● **Filmstrip**

The Filmstrip displays all the photos in the folder.

● **Filmstrip toolbar**

The toolbar lets you open a second window, return to the Library grid, and sort by a filter.



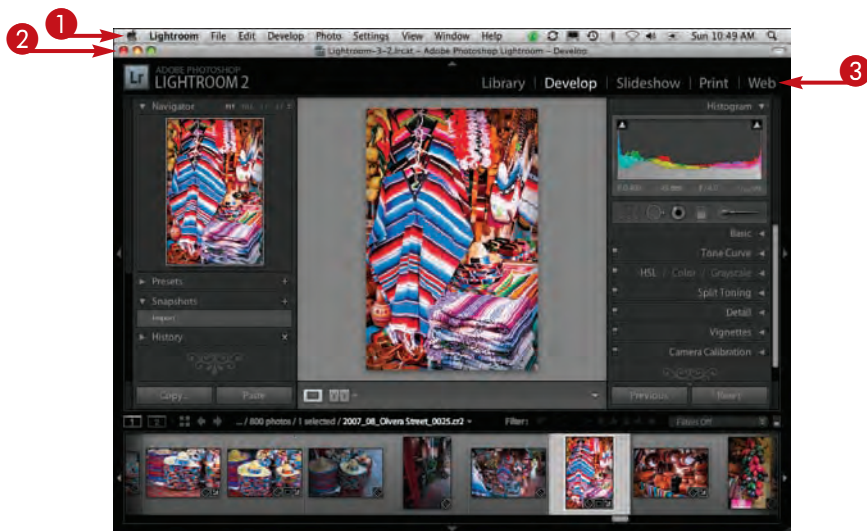
Change the Develop Module Interface

You can change the Develop module's interface to make the viewing area larger and use a second window on another monitor as shown for the Library module in Chapters 1 and 3. You can also increase the viewing area by hiding or minimizing the Filmstrip. Adding tools to the toolbar offers more customization options.



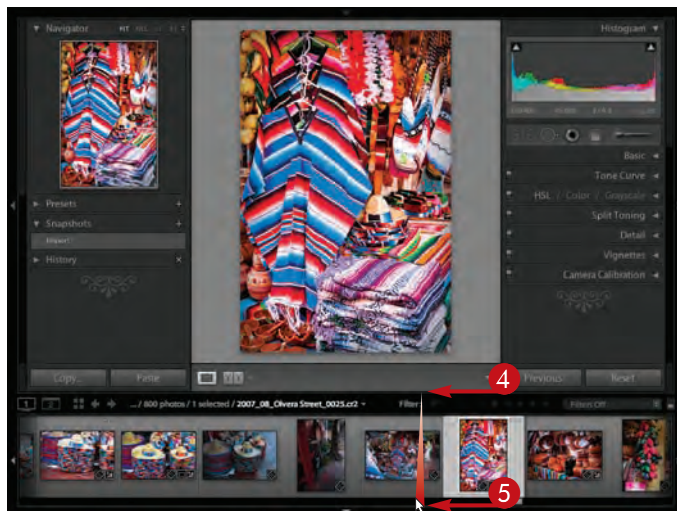
Change the Develop Module Interface

- 1 Press **F** to hide the Lightroom window title bar.
- 2 Press **F** again to hide the Lightroom menu bar.
- 3 Press **F5** to hide the Lightroom module picker bar.




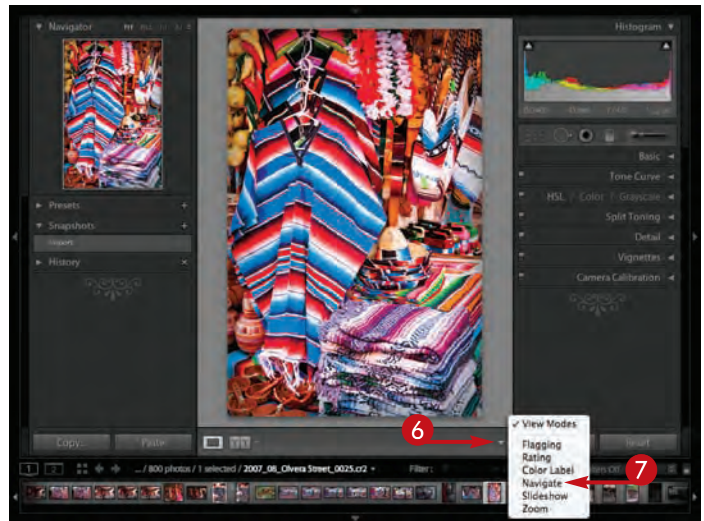
The interface expands.

- 4 Click the line between the toolbar and Filmstrip tools.
- 5 Drag down until the Filmstrip is as small as possible.



The interface expands.

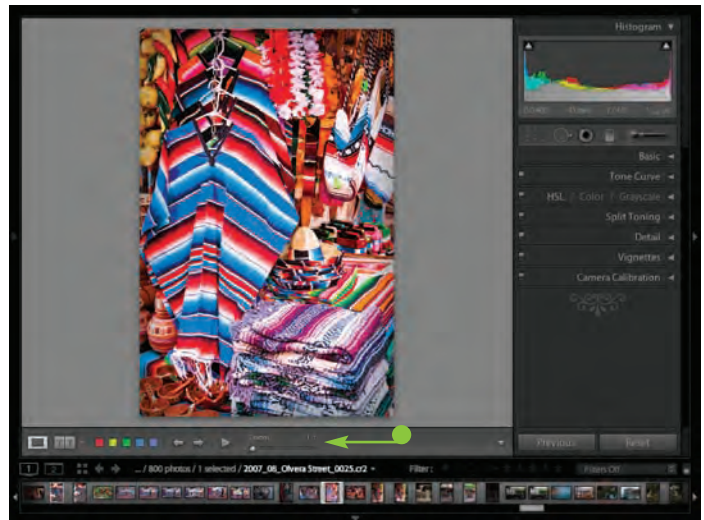
- 6 Click the toolbar .
- 7 Click any of the tools, such as **Navigate**, to add it to the toolbar.
- 8 Repeat Step 7 to add more tools to the toolbar.



- The tools are added to the toolbar.

Note: Depending on how many tools you added, some tools may not be visible with both the left and right panels open.

- 9 Press **F7** to hide the left panel to see more tools.




TIPS

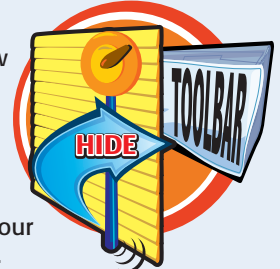
Can I hide the Filmstrip instead of minimizing it?

Yes. You can press **F6** to hide the Filmstrip and Filmstrip toolbar. Minimizing the Filmstrip first gives you more space when you toggle it open and still gives you access to the Filmstrip toolbar tools, such as the Second Window tool or the name of the file.



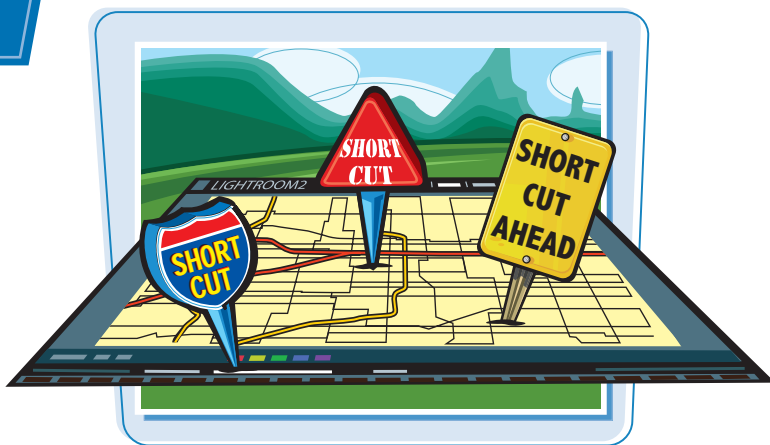
Can I hide the toolbar?

Yes. You can alternately press **T** to hide and show the toolbar. The toolbar's Before and After View mode icon  is useful for quickly changing the view modes to see a Before and After view of your edited image as you work.



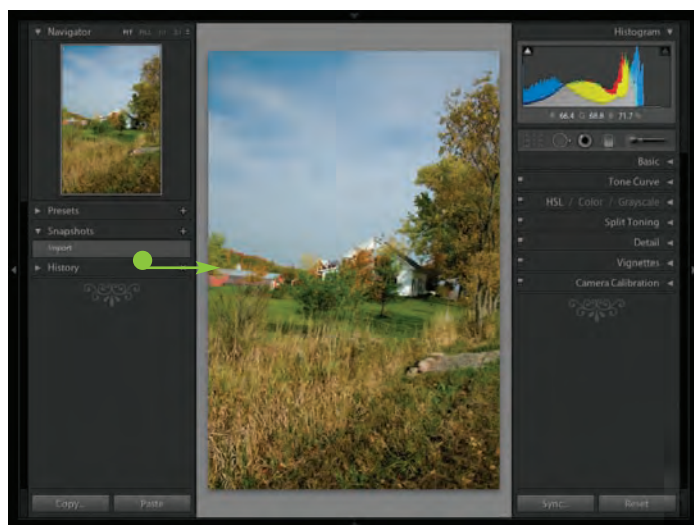
Try the Develop Module Shortcuts

You can modify the Develop module interface to fit each individual project. As you learn more keystroke shortcuts, you can hide the toolbar and still use all of the tools to navigate through images, add ratings and color labels, zoom into the photo to see more details, compare Before and After views, or start an impromptu slide show.



Try the Develop Module Shortcuts

- 1 Press **T** to hide the toolbar.
- 2 Press **F6** to hide the Filmstrip and Filmstrip toolbar.
- 3 Press **⌘+→** (**Ctrl+→**).

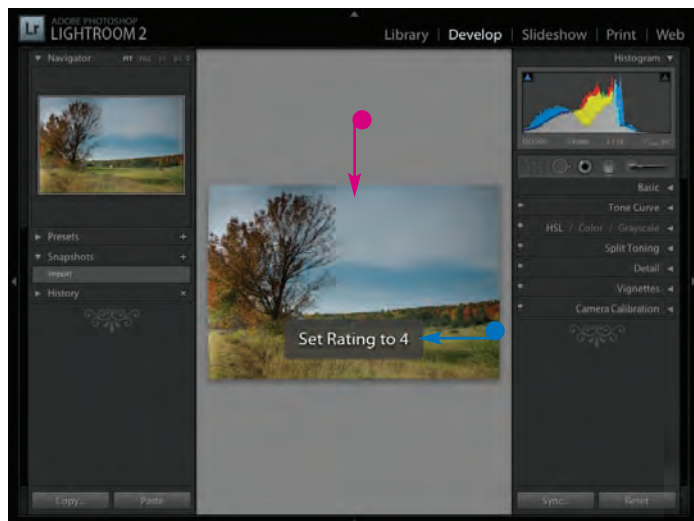


- The next photo appears in the main viewing area.
- 4 Repeat Step 3 to advance to the next image.
 - 5 Press **⌘+←** (**Ctrl+←**) to go to the previous image.
 - 6 Press **4**.

• A rating of 4 stars is added to the photo.

Note: Optionally, press **6** to add a red color label to the photo.

- 7 Press **⌘++** (**Ctrl++**).



- The image zooms in to the next size and Fill in the Navigator pane is highlighted.

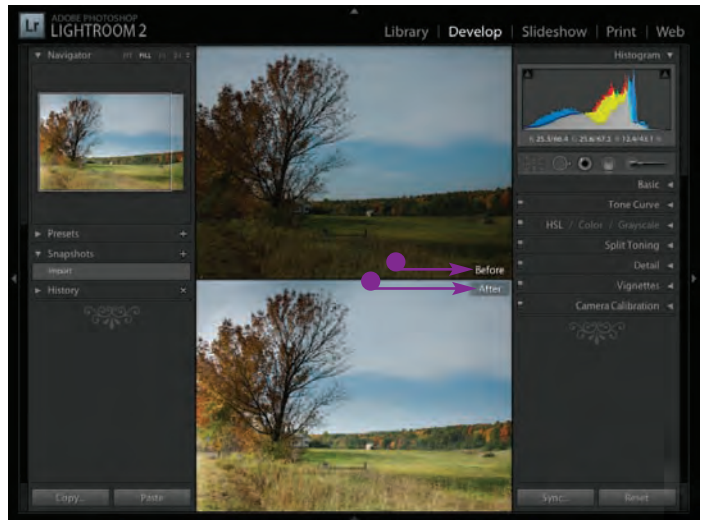
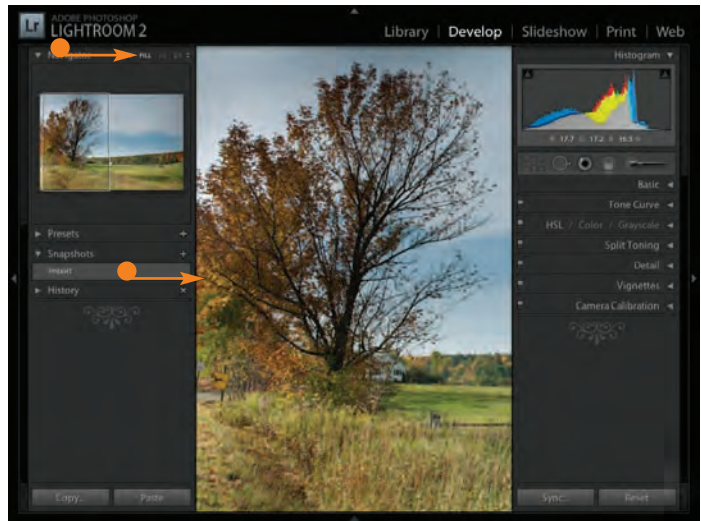
Note: Optionally, you can click **Fit**, **Fill**, **1:1**, or any of the zoom levels in the Navigator pane to zoom in or out of the image.

- 8 Repeat Step 7 to zoom in further.
- 9 Press **⌘** + **-** (**Ctrl** + **-**) to zoom back out one step at a time.
- 10 Press **Option** + **Y** (**Alt** + **Y**).

- The main viewing area changes to Before and After view up and down.

Note: You can view the Before and After images left and right by pressing **Y**.

Note: Optionally, press **⌘** + **Return** (**Ctrl** + **Enter**) to start an impromptu slide show of the images currently in the Filmstrip.



TIPS

Where can I find a complete list of the Develop module keyboard shortcuts?

The keyboard shortcuts for each module can be quickly accessed by clicking **Help** in the top menu and selecting **Develop Module** (or another module name) **Shortcuts**. You can also use the keyboard shortcut **⌘** + **/** (**Ctrl** + **/**) to open the module's keyboard shortcut list.



How can I compare the Before and After views as large as possible on one monitor?

You can press **Y** to go to the Before and After view left and right, or press **Option** + **Y** (**Alt** + **Y**) to view Before and After up and down, and then press **T** to hide the toolbar. Press **Shift** + **Tab** to hide all the panels. Press **T** and **Shift** + **Tab** to bring back all the panels and toolbar, and press **D** to return to the Loupe view.



Using the Develop Module Presets

Lightroom's *presets* are a group of settings you can use to give photos a specific look. You can preview the effects on your photo before applying the preset. You can also create your own presets, save them to use again on other photos, and export them to a different computer. You can then import your own custom presets from the other computer, or you can import third-party presets into your copy of Lightroom.



You can find presets to import on the Internet from vendors such as Kubotaimagetools.com.



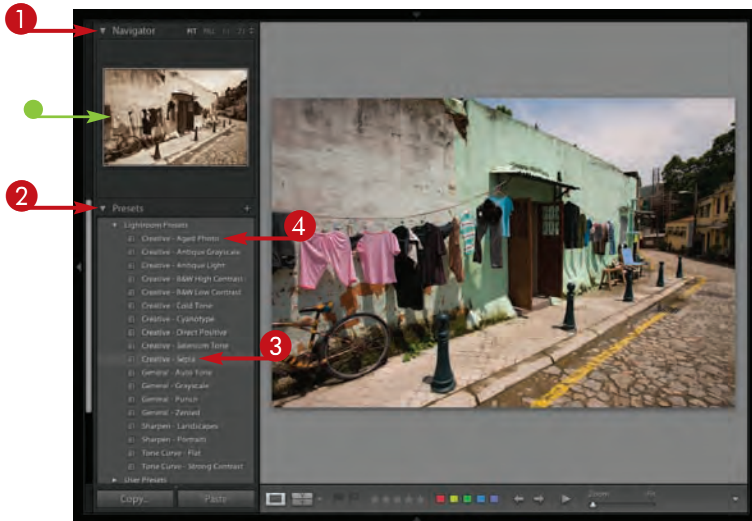
Using the Develop Module Presets

PREVIEW AND APPLY A LIGHTROOM PRESET

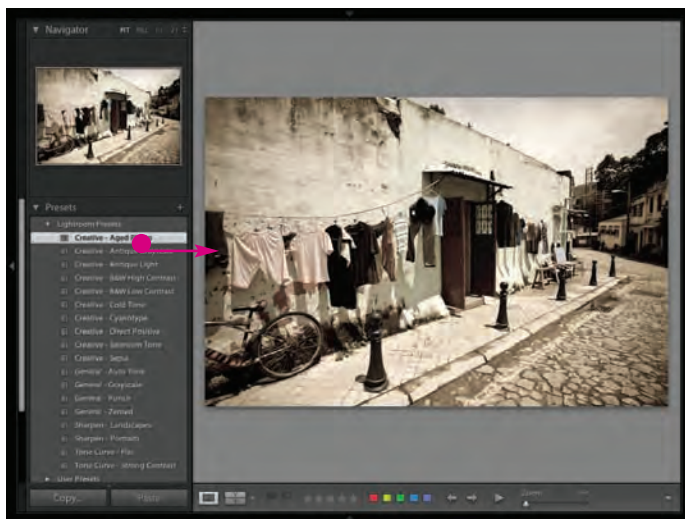
Note: Optionally, press **F8** to hide the right panel.

- 1 Click the **Navigator**  to open the Navigator if necessary.
- 2 Click the **Presets**  to expand the pane.
- 3 Position the cursor over each preset in the list.
- 4 Click a preset, such as **Creative - Aged Photo**.

The effects appear in the Navigator.



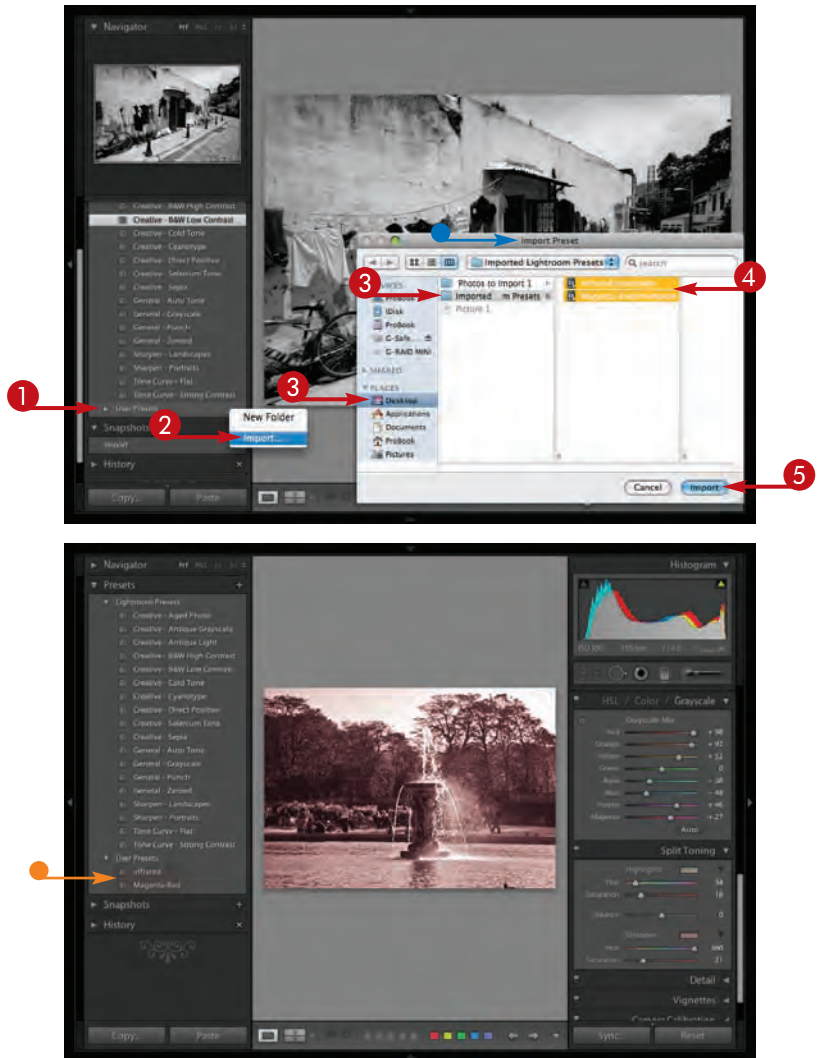
- The effects of the preset are applied to the photo in the main viewing area.



IMPORT A PRESET

- 1 **Control**+click (right-click) **User Presets** in the Presets pane.
- 2 Click **Import** in the menu that appears.
- An Import Preset dialog box appears.
- 3 Navigate to the location where you downloaded the presets.
- 4 Click or **⌘**+click to select the *preset-name.lrtemplate* files.
- 5 Click **Import**.

- The imported presets are listed under the User Presets.



TIPS

What happens if I have multiple photos selected in the Filmstrip?

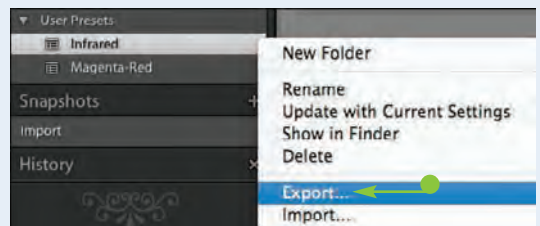
If you click a preset with multiple images selected, the settings are applied to all the selected photos.



How do I delete a preset from the list?

To delete any user preset, click the name of the preset in the list and click the minus sign (⊖).

You can also **Control**+click (right-click) the name of the user preset and put it into a new folder, or delete, rename, update, or export the preset (●).



Compare Images in the Develop Module

In the Develop module, you can compare the effects of the changes you make to an image using the editing tools, and see the same photo in Before and After views. This is different from the Compare mode or Survey mode in the Library module, where you can compare two or more separate photos.



Compare Images in the Develop Module

- 1 Click a photo in the Filmstrip to select it.
- 2 Press **F8** to hide the right panel.
- 3 Click a Lightroom preset such as **Creative - Direct Positive**.

The photo in the main viewing area changes.

- 4 Click **Before and After / Left and Right** ().



The Before and After views appear side by side.

- 5 Click .
- 6 Click **Before/After Left/Right Split**.



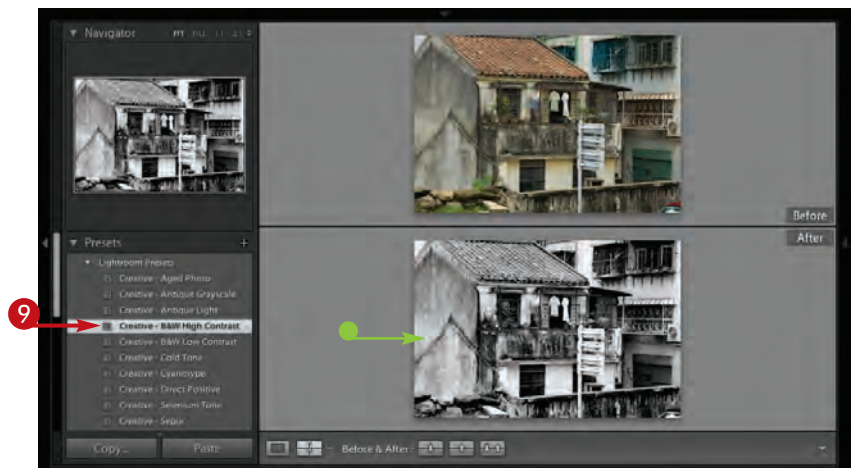
The Before and After views are combined into one image split in half.

- 7 Repeat Step 5.
- 8 Click **Before/After Top/Bottom**.



The Before and After views appear one above the other.

- 9 Click another Lightroom preset such as **Creative - B&W High Contrast**.
- The After view shows the new preset applied.



TIPS

What do the other three Before and After icons do?

Clicking the first one copies the Before settings to the After image. Clicking the second one copies the After settings to the Before image. Clicking the third one swaps the two settings.



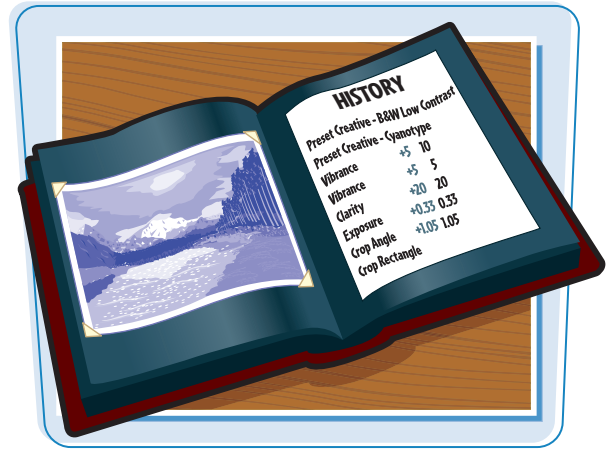
Is there a keystroke to viewing the Before and After views?

Yes. To see the two images side by side, press **Y** or **Option+Y** (**Alt+Y**). You can also toggle the Before and After views in Loupe view by pressing ****.



Using the Image History and Snapshots

Lightroom's History and Snapshots options let you experiment with your photos without making duplicates or virtual copies, while preserving all your edits. History lists all the steps you did on an image including the applied sliders. Snapshots let you freeze a specific editing state. You can take snapshots of different history states so you can create variations of an image starting from the settings in those snapshots.



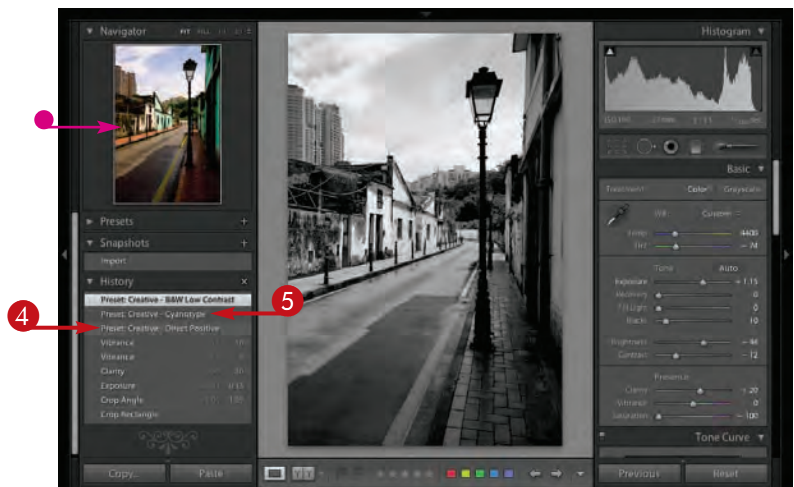
Using the Image History and Snapshots

Note: These steps illustrate how to use the History and Snapshots features rather than how to edit a photo.

- 1 Click an image in the Filmstrip.
- 2 Click any number of presets to apply them as in a previous task, or make edits using any of the right panel sliders.
- 3 Click the **History** .
- All the steps appear in the History list.



- 4 Position the cursor over the each history state.
- The effects of that setting are visible in the Navigator panel.
- 5 Click another history state.



- The photo in the main viewing area shows the effects of the earlier settings.

- 6 Click the **Create Snapshot** plus sign (+).

A text box appears.

- 7 Type a descriptive name for the snapshot.

Note: Optionally, you can type **A** and a descriptive name for the first snapshot. You can then type **B** before the second snapshot name and so on so that the snapshots are listed alphabetically in the order they were taken.

- 8 Click the top history state in the list.

- That history state is applied to the photo in the main viewing area.

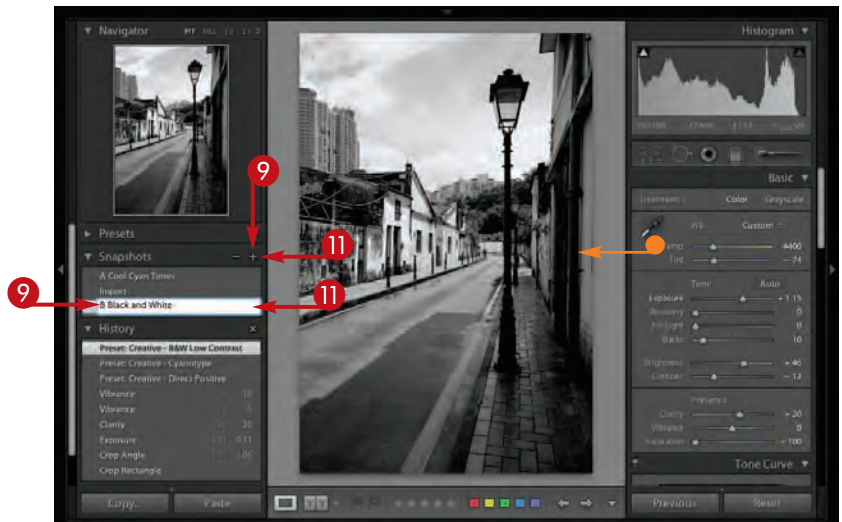
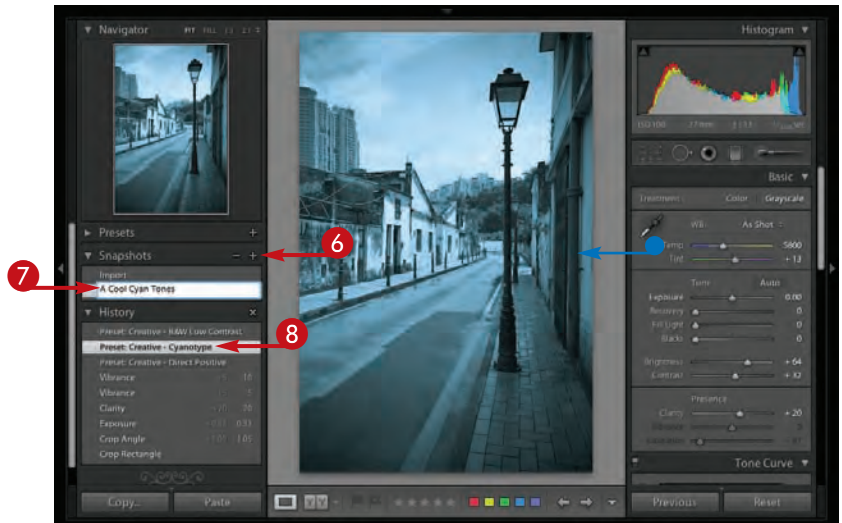
- 9 Repeat Steps 6 and 7 to create a second snapshot.

Note: Optionally, type **B** and a descriptive name for the second snapshot.

- 10 Click more presets or make edits using any of the right panel sliders.

- 11 Repeat Steps 6 and 7 to create a third snapshot.

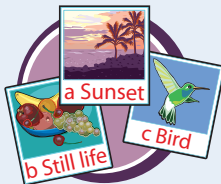
Note: Optionally, type **C** with the third snapshot name.



TIPS

Why do you suggest using a letter before each snapshot name?

Snapshots are listed alphabetically rather than sequentially. Adding **A** for the first snapshot, **B** for the second, and so on allows you to easily see the order of the snapshots you take.



Are the edits I make to the photo in the Library module recorded in the history?

Yes. Both the Library module edits and Develop module edits are recorded as history states, and appear chronologically in the list of steps in the History pane of the Develop module.



continued

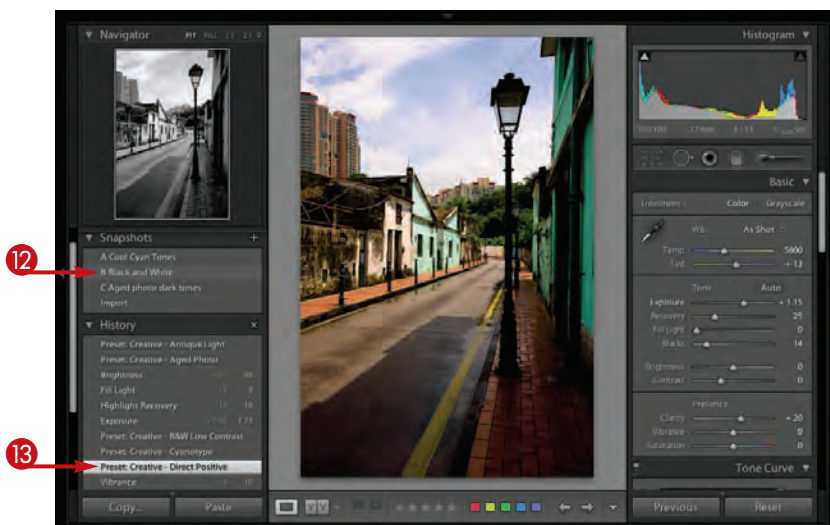
Using the Image History and Snapshots (continued)

Lightroom's history is not lost when you close Lightroom. The History list is written into the DNG or embedded into the XMP file for the photo. You lose the history states only if you click an earlier state and then make more changes. The previous editing steps forward from that history state are erased and overwritten by the new changes you make.



Using the Image History and Snapshots (continued)

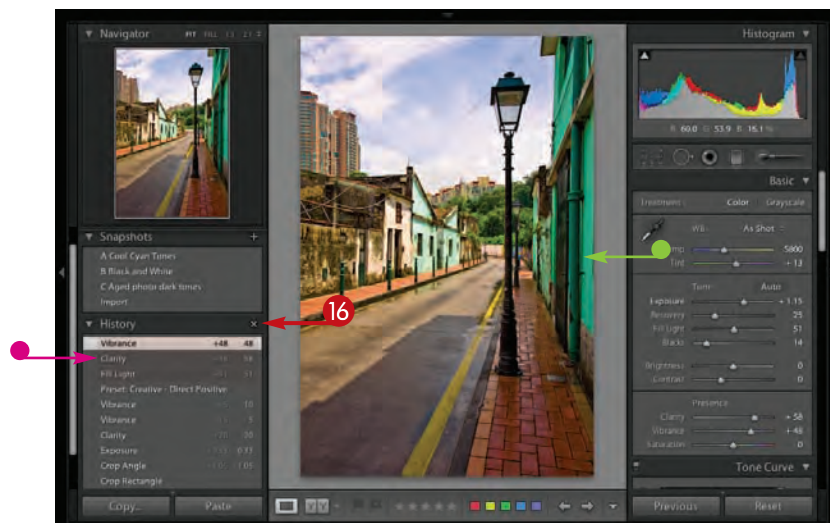
- 12 Position the cursor over a snapshot to see the effect in the Navigator panel.
- 13 Click an early history state to apply it.
- 14 Click additional presets or make other edits using any of the right panel sliders.



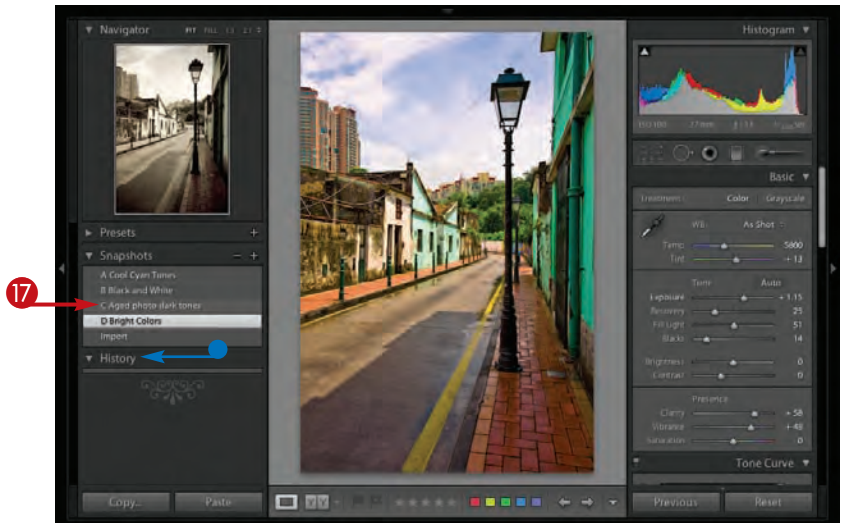
The changes are applied to the photo.

New states replace the previous ones listed above the history state selected in Step 13.

- 15 Repeat Steps 6 and 7 to create another snapshot.
- 16 Click the **Clear History** button (X).



- The History list is cleared.
- 17 Click a different snapshot to apply it.



- The snapshot is listed as a history state.
- 18 Click the **Snapshot** minus sign (−).
- The selected snapshot is deleted from the Snapshots list.

Note: Snapshots are deleted one at a time. History states are all deleted at once.



TIPS

If the History list is embedded with my DNG file or into the XMP file, does it increase the size of the file?

Yes, slightly. As the list gets long, you can create snapshots of the states you want to keep and clear the History list by clicking the **History Clear All** button (✕).



Can I still undo steps using the Undo keyboard shortcut?

Yes. You can press **⌘+Z** (Ctrl+Z) to undo step by step and **⌘+Shift+Z** (Ctrl+Shift+Z) to restore the steps one by one.



Rotate a Photo in the Develop Module

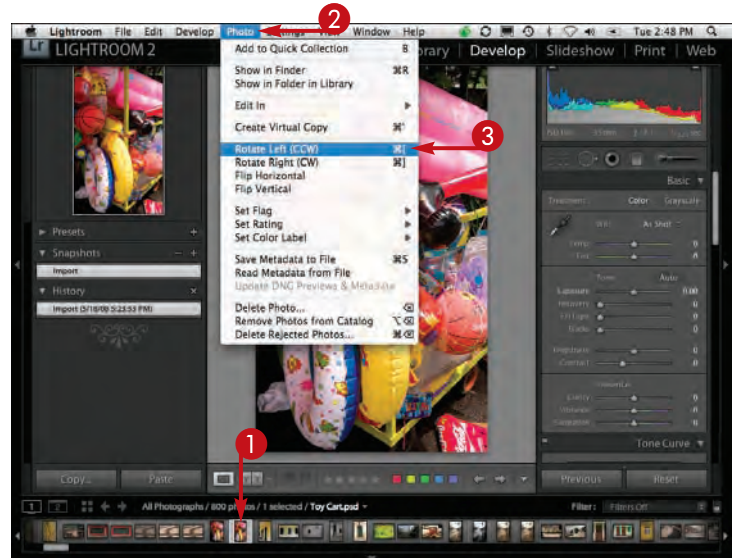
You can rotate a photo in the Develop module using the menu bar or using a keystroke.

To rotate multiple selected photos at one time, you must change to the Library module and click the rotation arrows on the photos in Grid mode or use the rotation arrows in the Library mode toolbar for the Loupe view.



Rotate a Photo in the Develop Module

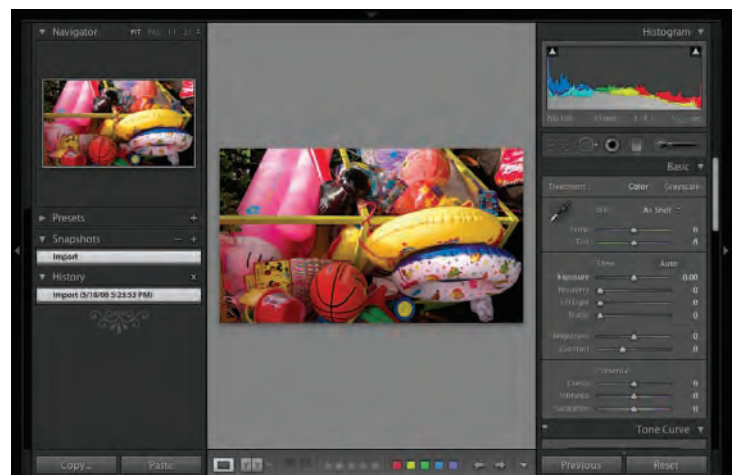
- 1 Click a photo in the Filmstrip to select it.
- 2 Click **Photo**.
- 3 Click **Rotate Left (CCW)**.



The photo rotates in the selected direction.

- 4 Press **⌘+I** (**Ctrl+I**) to rotate the photo back (clockwise).

Note: Pressing **⌘+I** (**Ctrl+I**) rotates the photo counterclockwise.



Copy and Paste Edits from One Photo to Another

chapter 7

You can edit a photo in either or both the Library and the Develop modules and then quickly apply the same adjustments to another photo using the Copy and Paste buttons in the Develop module. You can apply all the changes or select which edits to apply.



Copy and Paste Edits from One Photo to Another

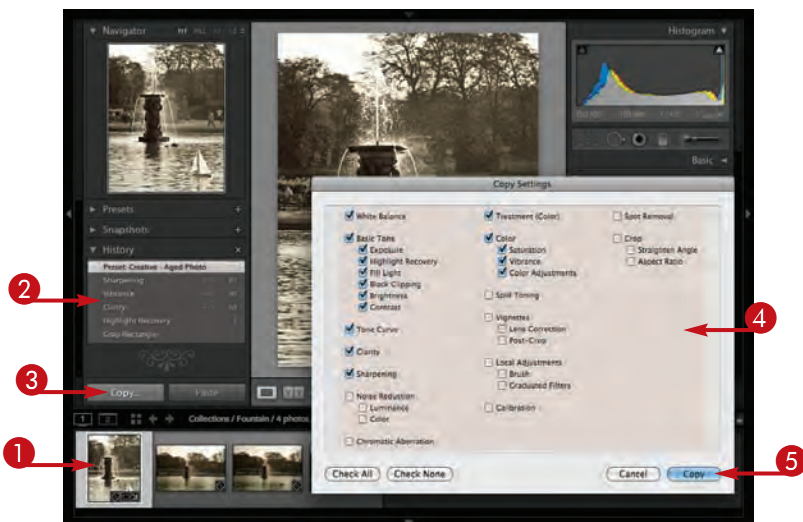
- 1 Click a photo in the Filmstrip to select it.
- 2 Make tonal changes, edit the aspect ratio or crop the photo, and add a preset.
- 3 Click **Copy**.

The Copy Settings dialog box appears.

- 4 Click any of the settings to deselect them.

Note: Optionally, click **Check None** to deselect all the settings and then click only the ones to apply.

- 5 Click **Copy**.

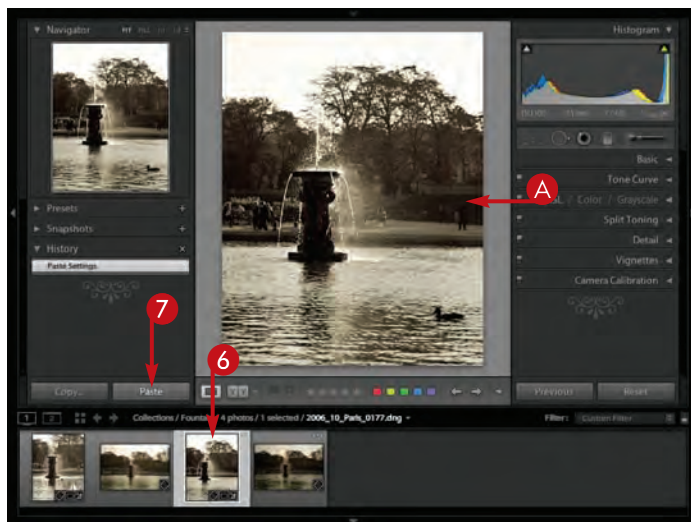


- 6 Click another photo in the Filmstrip.
- 7 Click **Paste**.

- The selected edits are applied to the second photo.

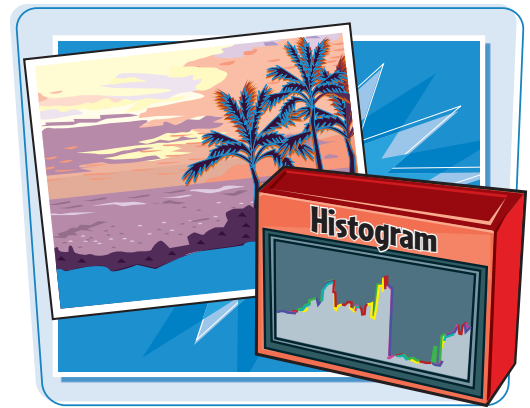
Note: You can press **Option** and click the **Copy** button to bypass the Copy Settings dialog box. Any of the settings selected in a previous copy operation will be applied to the second photo.

Note: Optionally, you can click **⌘+Shift+C** (**Ctrl+Shift+C**) to copy the settings and **⌘+Shift+V** (**Ctrl+Shift+V**) to paste them.



Using the Histogram Features in the Develop Module

The histogram in both the Library module and the Develop module represents the range of color and tonal values in the selected photo. However, the Develop module's histogram is a functional tool you can use to adjust the tones in the image. This histogram also includes warning triangles indicating clipped values, or areas with no detail, and displays these in the image with red and blue.



Using the Histogram Features in the Develop Module

Note: The steps to creating the best negative depend on the photo and the subject matter. The following steps are to illustrate the use of the histogram.

- 1 Click a photo in the Filmstrip.
- 2 Click the **Histogram** icon.
- 3 Click the **Basic** tab.
- 4 Position the cursor over the left triangle.

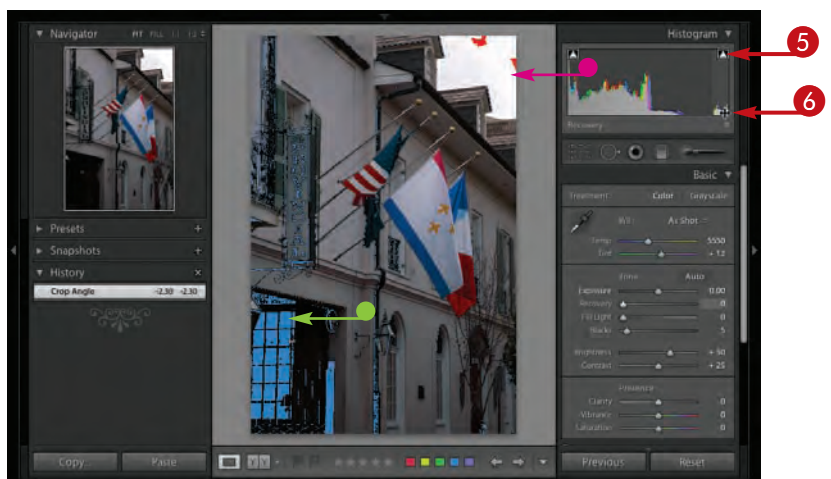
Both panes in the right panel expand.







- The 100% black shadow areas with no detail are colored in blue.
- 5 Position the cursor over the right triangle.
 - The 100% white highlight areas with no detail are colored in red.

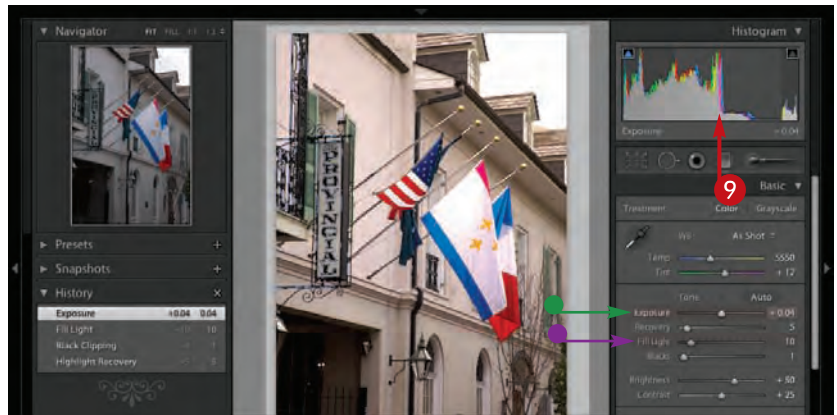
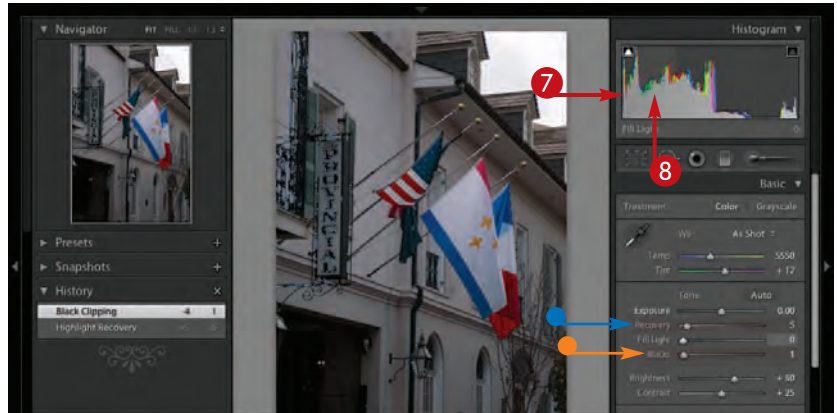
Note: Optionally, click both triangles to show the warning colors as you make adjustments.

- 6 Click in the far right of the histogram and drag to the left.



- The histogram moves away from the right and the red warning areas diminish. The Recovery  moves to the right accordingly.
- 7 Click in the area at the far left of the histogram and drag to the right.
- The histogram moves away from the right and the blue warning areas diminish. The Blacks  moves to the left accordingly.
- 8 Click in the Fill Light area in the histogram and drag to the right.
- The histogram spreads to the right and the Fill Light  increases accordingly.
- 9 Depending on the photo, click in the Exposure area in the histogram and drag in one direction or the other as needed.
- The histogram and Exposure  change to match.

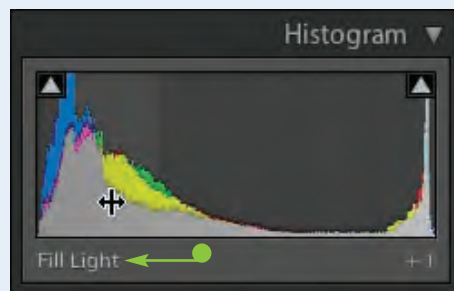
Note: Sometimes clipping is necessary, as in the case of specular highlights, the kind that reflect off a shiny surface, and for the darkest shadows to create better contrast.





TIPS

Is there a way to recognize which sliders move when I click in the histogram?

The Basic panel's sliders correlate to specific areas in the histogram. As you click and drag directly in the histogram in these areas, the affected adjustment appears below. You adjust for blacks on the far left, fill light (●), exposure in the central areas, and highlight recovery on the far right. The corresponding sliders move accordingly in the Basic panel.



Is there a way to see the clipped areas without leaving the warning triangles on?

Yes. If you press and hold the **Option** (Alt) key as you move the **Recovery** , the image is displayed in Threshold mode and turns black. The clipped highlights appear as posterized bright areas. Similarly, if you press and hold the **Option** (Alt) key as you move the **Blacks** , the clipped shadows appear as posterized blacks against a totally white image.

Straighten Images

The first step in editing a photo is often to straighten a crooked horizon. The Develop module offers three ways to straighten an image. Using the Angle tool directly on the photo is the most direct method. You can also move the Angle slider, or you can rotate the photo directly with the superimposed grid to straighten the image.

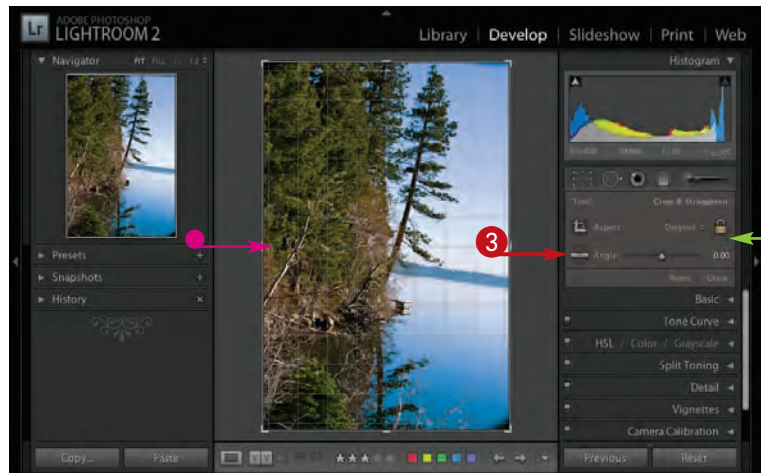


Straighten Images

- 1 Click a photo in the Filmstrip.
- 2 Click the **Crop Overlay** tool (📏).



- The Crop and Straighten tools are added to the right panel.
 - A grid overlay appears on the image.
- 3 Click the **Straighten** tool (📏).



- The cursor changes to the Straighten tool (☞).
- 4 Click and drag in the photo along the horizon line and release the mouse.

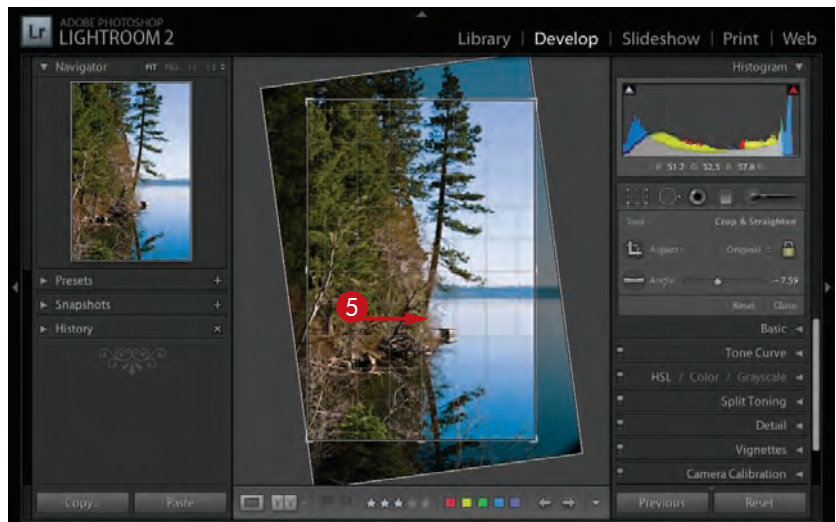
Note: If the horizon line is not visible in the photo, you can click and drag along any line that should be horizontal or any edge that should be vertical.



The photo is automatically straightened.

The crop marquee is set to include all the areas of the image that fit inside using the original aspect ratio.

- 5 Press **Return** (**Enter**) or double-click in the image to set the crop.



TIPS

Can I rotate the photo itself instead of clicking and dragging in the photo?

Yes. Click the **Crop Overlay** tool (☞) to activate the Crop and Straighten tools. Press **O** until you see the Grid overlay. Position the cursor just outside the crop marquee (☞ changes to ☞). Slowly move in one direction or the other, trying to line up the horizon or a vertical line in the photo with the lines in the grid. Press **Return** (**Enter**). The photo is straightened and cropped to fit.



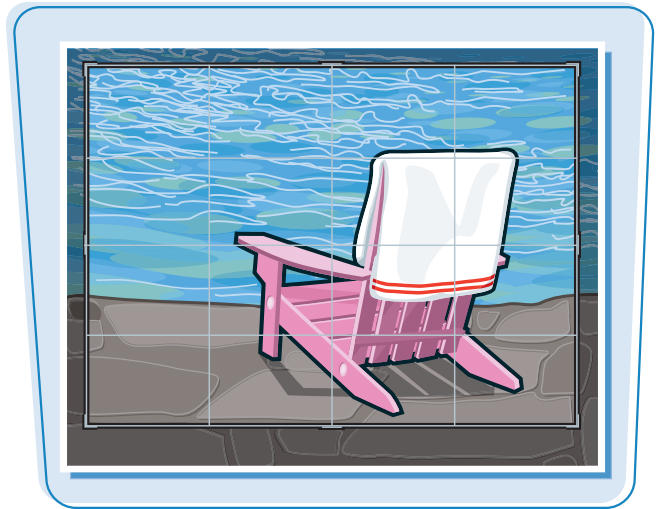
How do I use the slider to straighten an image?

Click the **Crop Overlay** tool (☞) to activate the Crop and Straighten tools. Press **O** until you see the Grid overlay. Focus on the image as you click and drag the **Angle** (☞) until the horizon or a vertical line in the photo lines up with the lines in the grid.



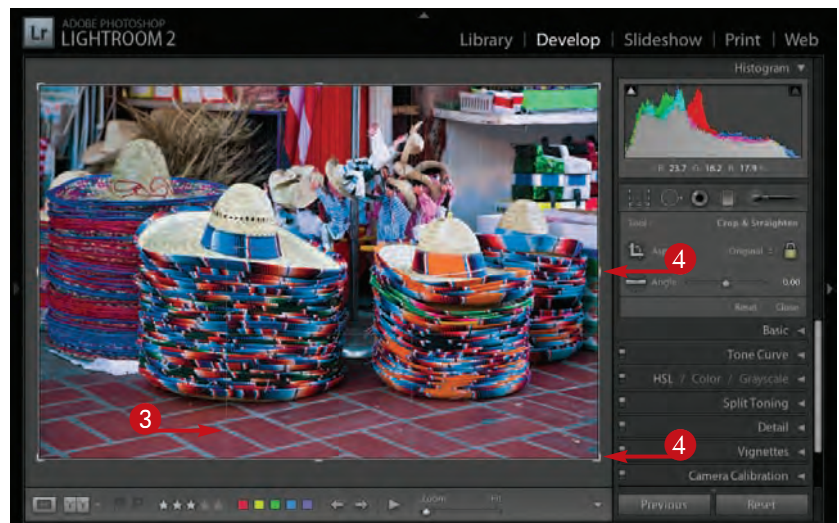
Recompose Your Photo with a Crop

The Crop tool in the Develop module lets you crop to any dimensions to fit your image or crop to a specific aspect ratio. You can revert the photo to its original dimensions at any time. You can quickly access the Crop tool in the Develop module from any other module by pressing **R**.



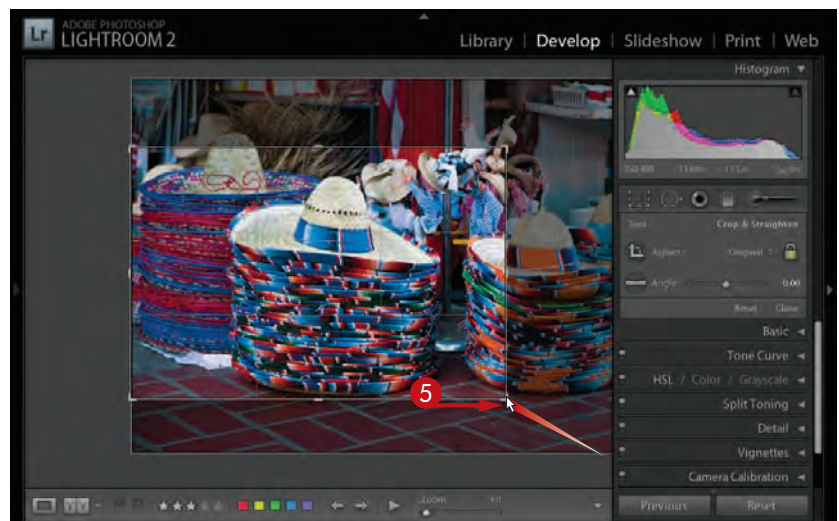
Recompose Your Photo with a Crop

- 1 Repeat Steps 1 and 2 in the previous task to apply the crop overlay on a photo.
- 2 Press **F7** to hide the left panel.
- 3 Press **O** until the crop guide overlay appears in thirds.
- 4 Click and drag the edges of the crop marquee to change the composition of the photo.



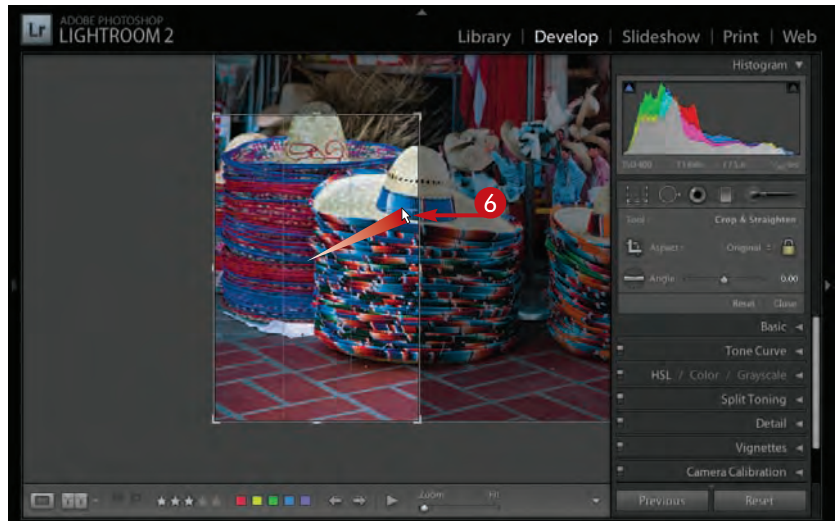
The crop marquee changes the look of the image.

- 5 Click the bottom right corner of the crop marquee and drag to the left.



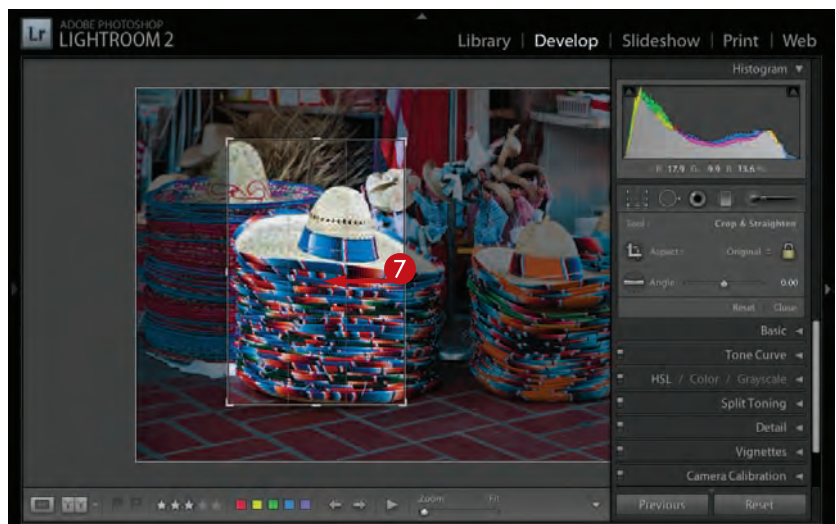
The horizontal aspect ratio changes to a vertical aspect ratio.

- 6 Click in the image and drag.



The image moves inside the crop marquee.

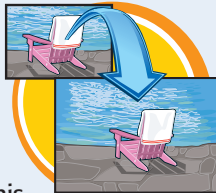
- 7 Press **Return** (**Enter**) or double-click in the image to apply the crop.



TIPS

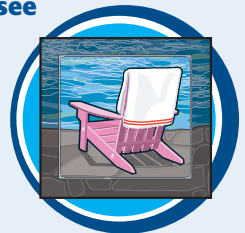
How can I return to the original photo dimensions?

You can click **Reset** in the Crop and Straighten pane. Be careful not to click the Reset button at the bottom of the right panel because this would reset the image completely, removing all the edits you have made.



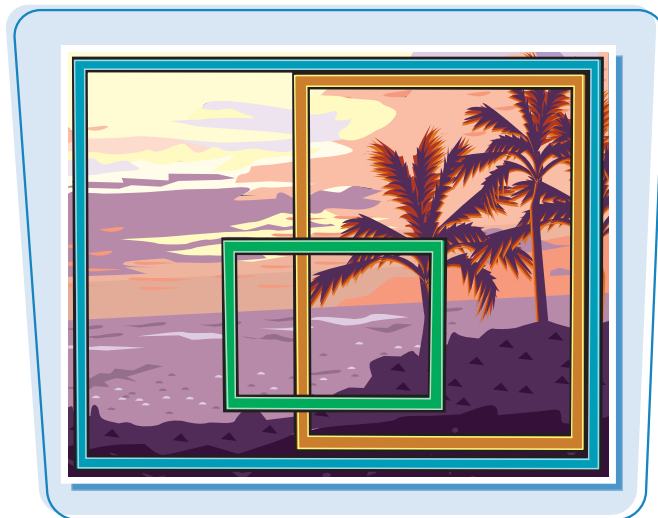
Is there an easier way to see what I am cropping?

Yes. Once you have the crop marquee on the photo, press **L** to dim the lights. You can continue to click and drag the crop marquee until the photo fits your composition.



Creatively Crop an Image for Effect

You can crop with a different preset fixed aspect ratio by selecting from a menu, or you can create your own aspect ratio and save it. You can even crop without any preset and adjust the size to fit your subject matter. You can also use the different overlay styles as a compositional guide.



Creatively Crop an Image for Effect

CREATE A NEW CROP RATIO

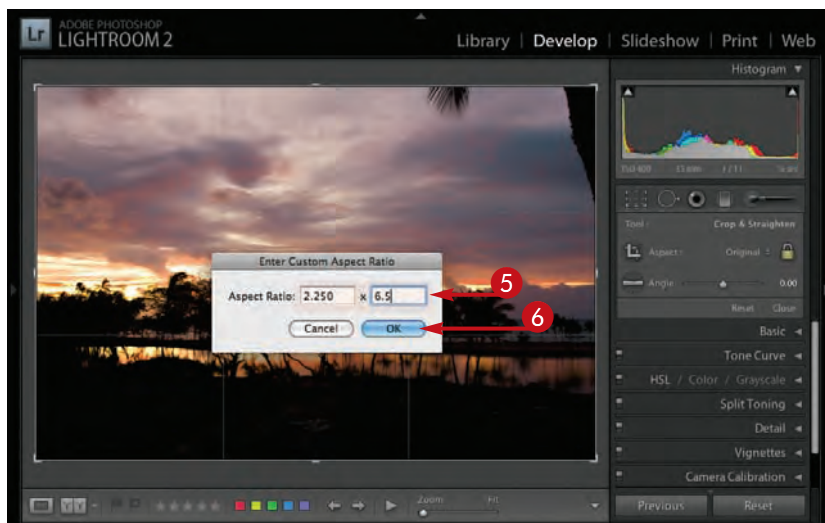
- 1 With a photo selected, click the **Crop Overlay** tool (C).
- 2 Press **F7** to hide the left panel.
- 3 Click the **Original** ▾.
- 4 Click **Enter Custom** in the menu that appears.

Note: You can also click any of the preset aspect ratios.

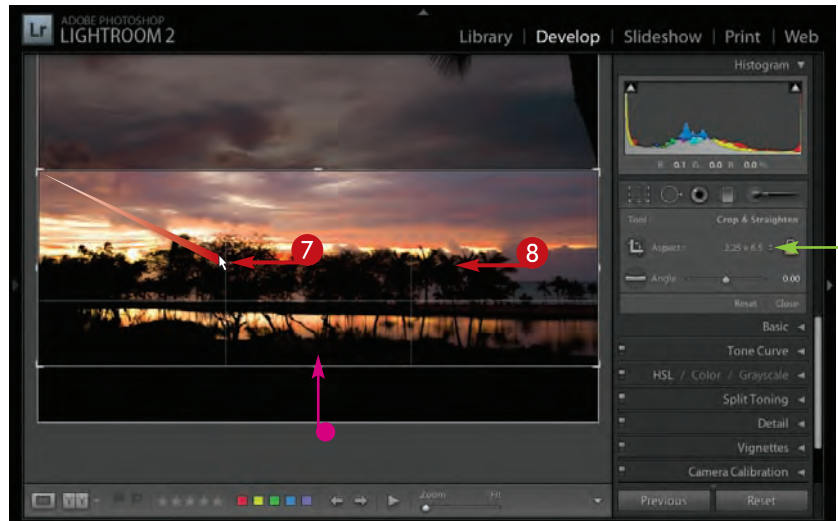


The Enter Custom Aspect Ratio dialog box appears.

- 5 Click in the boxes and type your dimensions.
- 6 Click **OK**.



- The custom aspect ratio is listed in the Crop and Straighten tool pane.
- The image displays the new crop ratio.
- 7 Click and drag in the image or on the crop marquee to adjust the composition.
- 8 Press **Return** (**Enter**) or double-click in the image to set the crop.



CROP WITHOUT A SET ASPECT RATIO

- 1 Repeat Steps 1 and 2.
- 2 Click the **Aspect Ratio** lock (🔒 changes to 🔓).
- 3 Click the **Crop Frame** tool (📐).
- 4 Click and drag in the photo to freely crop the image to match the subject matter.



TIPS

Why are there other styles of crop overlays?

The overlays are guides for improving the composition of the photo. For example, you can use the Thirds overlay to apply the traditional rule of thirds and place the subject at the intersections of the lines, or guide the viewer's eye into the photo using the Golden Spiral overlay.



How do I access the other styles of overlay guides?

Once you activate the crop overlay by pressing **R** or clicking the **Crop Overlay** tool (📐), you can cycle through the different styles of overlays by pressing **O**. You can also click **View** in the menu bar, click **Crop Guide Overlay**, and select the name of the guide overlay you want. You can alter the direction of the overlay lines in the Golden Spiral and Triangle overlays by pressing **Shift + O**.



Repair Dust Spots and Other Imperfections

Digital camera sensors attract dust that appears as spots on photos. Lightroom's Spot Removal tool can repair dust spots and other blemishes in an image. If the spot is due to camera sensor dust, it will probably reappear in the same area on multiple photos. You can fix one photo and then have Lightroom synchronize that spot repair with other selected photos.



Repair Dust Spots and Other Imperfections

REMOVE DUST SPOTS

- 1 Click a photo in the Filmstrip to select it.
- 2 Click **1:1** in the Navigator to zoom to 100%.

Note: Optionally, press **Spacebar** and click to zoom to 100%.

- 3 Press **Home**.

Note: If you are using a laptop or your keyboard does not have a **Home** key, press **Fn** + **←** instead.

- The preview section moves to the top left corner in the Navigator.

- 4 Press **Page down**.

Note: If you are using a laptop or your keyboard does not have a **Page down** key, press **Fn** + **↓** instead.

- The preview section moves to the next section in the Navigator.

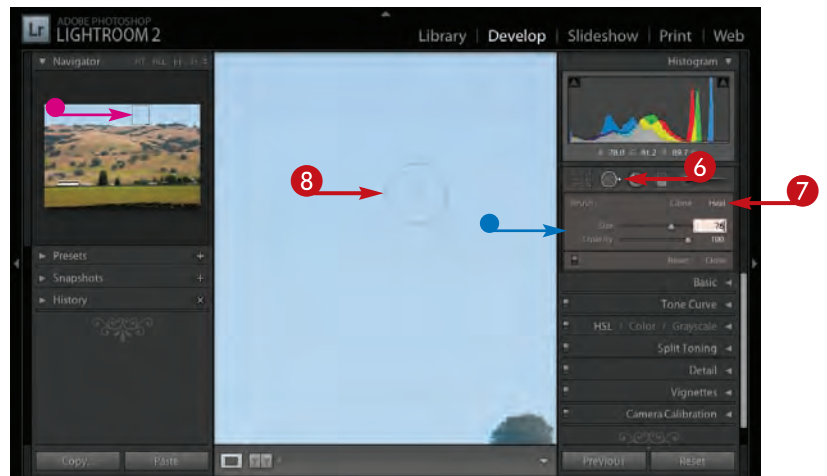
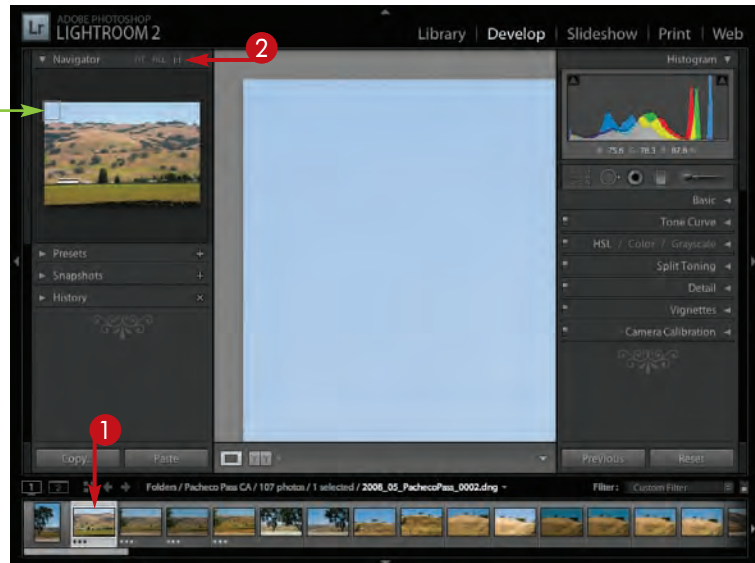
Note: Pressing **Page down** shifts the preview area from the top left down, back up to the top, and down again to the bottom right.

- 5 Repeat Step 4 until you see dust spots or blemishes.
- 6 Click the **Spot Removal** tool (.

- The Spot Removal pane expands.

- 7 Click **Heal**.

- 8 Position the cursor over the spot to remove.



9 Press **[I]** to reduce or **[J]** to enlarge the circle until it is slightly larger than the spot.

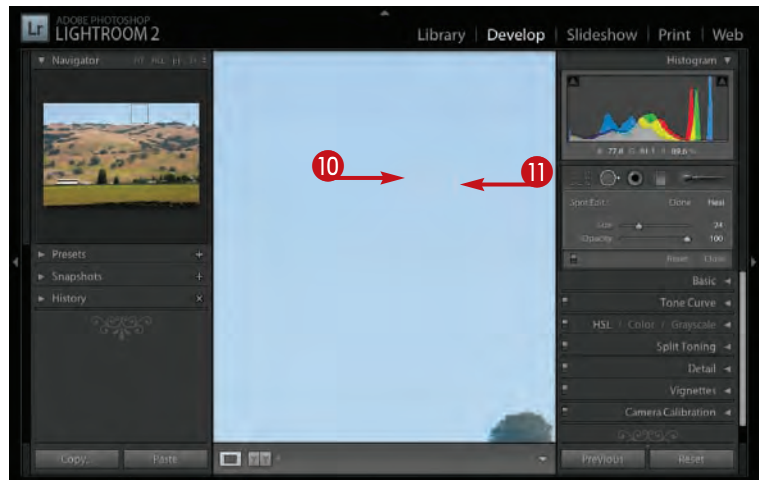
10 Click once, and two circles appear.

11 Click and drag the second circle to a clean area nearby.

The spot is healed.

12 Repeat Steps 4 to 11 to scan and repair other spots.

Note: Click a healing circle and press **Delete** (**Backspace**) to delete it and the edit.



REMOVE THE SAME SPOTS ON MULTIPLE IMAGES

13 Click **Copy**.

14 In the Copy Settings dialog box, click **Check None**.

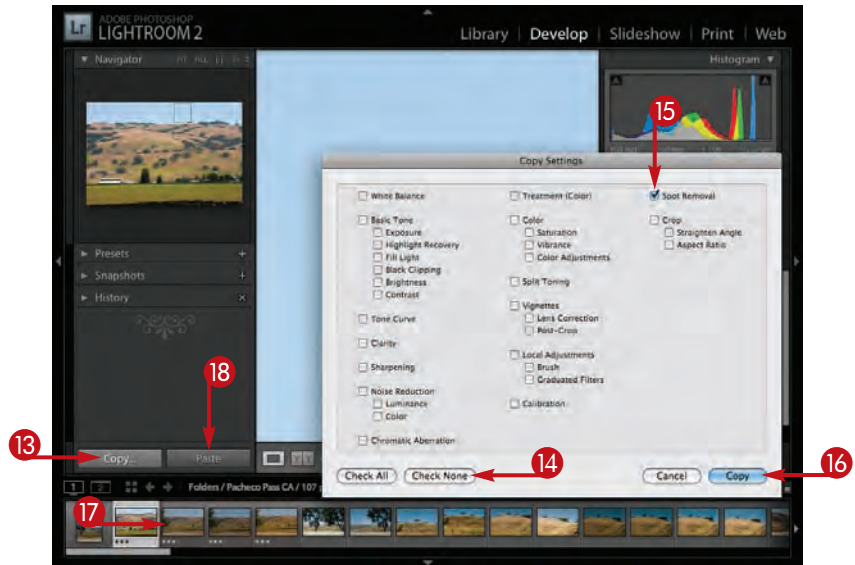
15 Click **Spot Removal** (☐ changes to ☒.

16 Click **Copy**.

17 Click other photos taken from the same shooting position.

18 Click **Paste**.

The same spots in all the selected photos are healed.



TIPS

Once I copy the spot repairs, can I change the area used for the repair?

Yes. The healing circles are editable whenever the Spot Removal tool is selected. With the photo selected, click the **Spot Removal** tool (**I**) to activate the healing circles. Click and drag the repair location to a different area of the photo and release the mouse.

What is the difference between the Clone function and the Heal function?

In Clone mode, the Spot Removal tool clones, or copies, the pixels from one area to another. In Heal mode, the tool samples the color and texture of the repair location to blend the area being repaired. The Heal mode blend can distort an edge near the area being repaired. When this happens, try using the tool in Clone mode.

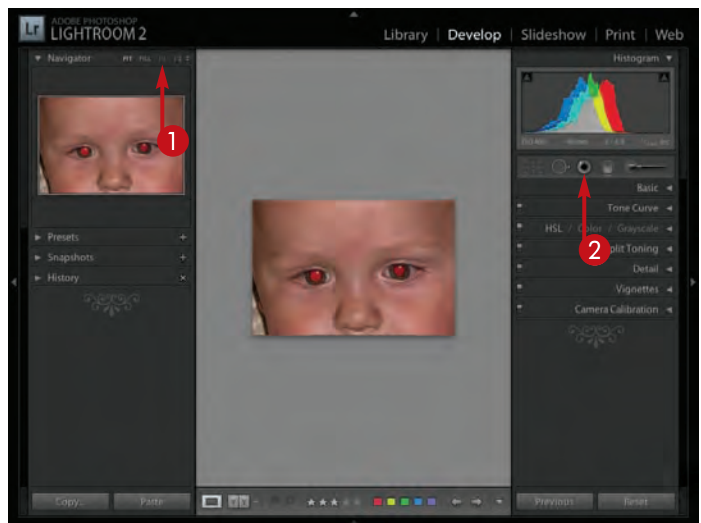
Remove Red Eye

Using any camera with an integrated flash or even a separate flash unit mounted close to the lens can produce the red-eye effect in your subject. Lightroom provides an easy to use Red Eye Correction tool in the Develop module so you do not have to go to another image editor to correct the image.



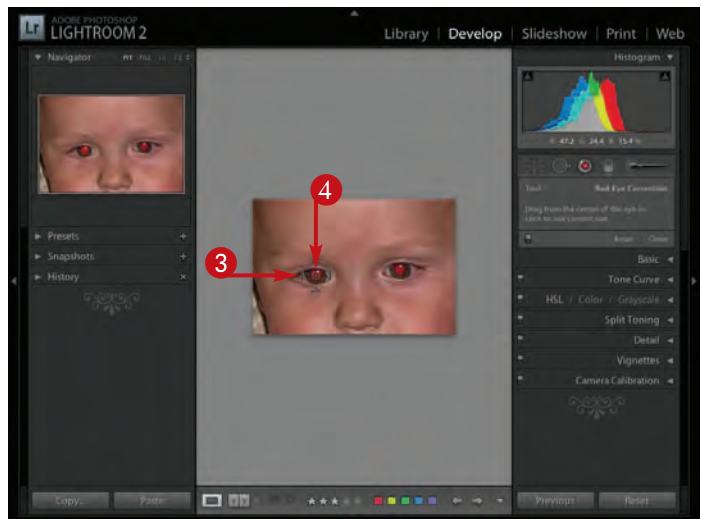
Remove Red Eye

- 1 With the photo selected, click **1:1** in the Navigator pane or press **Spacebar** and click to zoom to 100%.
- 2 Click the **Red Eye Removal** tool (👁).




The tool turns red and the tool pane expands.


- 3 Position the cursor over one eye. The cursor changes shape.
- 4 Click and drag from the center of one eye outward.
- 5 Release the mouse.



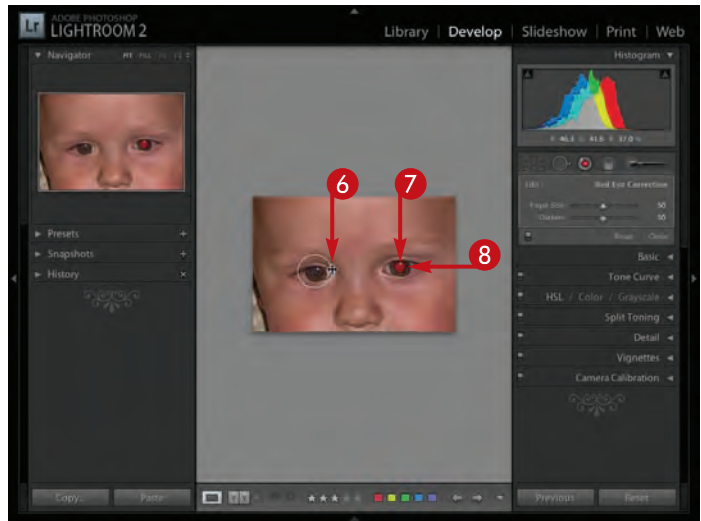
The pupil is desaturated.

- 6 Click the edge of the correction circle and drag to adjust the pupil size.


The cursor changes to .

Note: Optionally, click and drag the **Pupil Size**  in the Red Eye Correction pane in the right panel.


- 7 Position the cursor over the other eye.
- 8 Click to apply the same size correction or click and drag to fit the other eye.

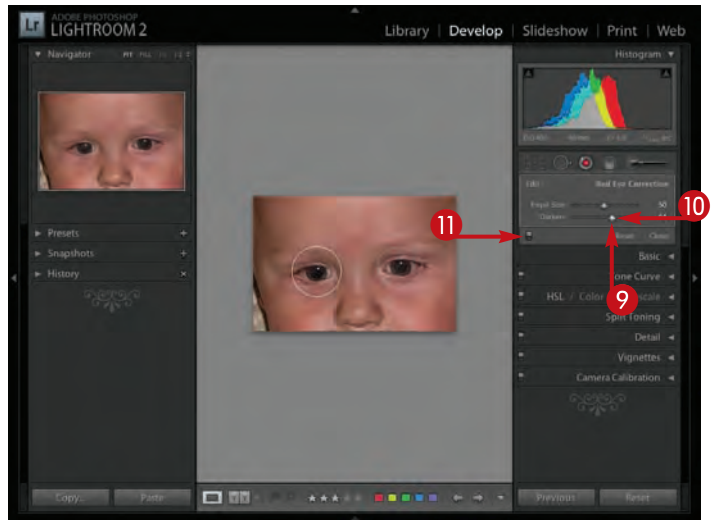


The second eye is desaturated.

- 9 Click and drag the **Darken**  as needed to adjust the color of the pupil.

The darkness increases for the second pupil.

- 10 Repeat Step 9 for the first eye.
- 11 Click the **Switch**  to turn off the correction.
- 12 Repeat Step 11 to turn the correction back on.



TIPS

How can I remove a red eye correction if I made a mistake?

You can click the correction circle over the eye and press **Delete** (**Backspace**). To remove all corrections in one image, click **Reset** under the Red Eye Correction pane. Do not click the **Reset** button at the bottom of the right panel because that resets all previous edits to the photo.



Does this tool work with the yellow-to-white eyes that appear with photos of animals?

No. This tool only corrects the red eye phenomenon. You need to use Photoshop or Photoshop Elements to properly correct the flash effect on an animal's eyes.



CHAPTER

8

Image Processing in the Develop Module

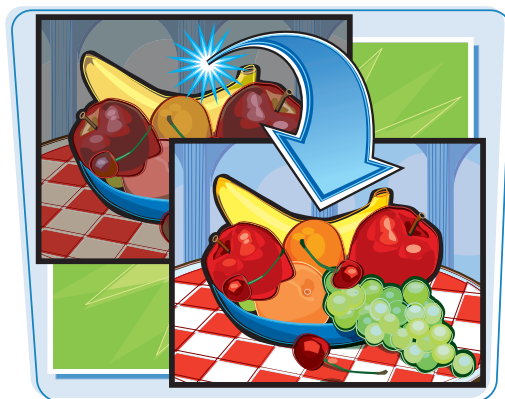


The photo processing tools in the Develop module are sophisticated and powerful. However, because Lightroom makes it easy to see the effect on your photo as you edit, and because all changes are always nondestructive, you can safely retouch and edit photos to make the best digital negative from your original photo file or give an image a unique look.

Adjust the White Balance	192
Modify the Basic Exposure	196
Make Precise Changes with the Tonal Adjustments Tools	198
Improve the Photo with Clarity, Vibrance, and Saturation.....	200
Make Controlled Tone Curve Adjustments	202
Explore the HSL/Color/Grayscale Tools	206
Adjust Individual Color Ranges	208
Creatively Convert a Color Image to Black and White	210
Tone an Image	212
Brush On a Localized Adjustment.....	214
Add a Localized Graduated Filter	218
Reduce Digital Noise in the Image	220
Decrease Chromatic Aberration.....	222
Improve Details with Sharpening	224
Add a Lens Vignette for Effect	226
Save Your Settings as a Custom Preset	228
Understanding the Camera Calibration Feature.....	230
Using the Camera Calibration Pane	232

Adjust the White Balance

Whether you use the auto white balance of the digital camera or set a custom white balance, you may need to adjust the colors of your photo to eliminate color casts and make neutral areas really neutral. Lightroom's Develop module includes three tools for adjusting the white balance in a photo: the white balance presets, the white balance selector tool, and temperature and tint sliders.



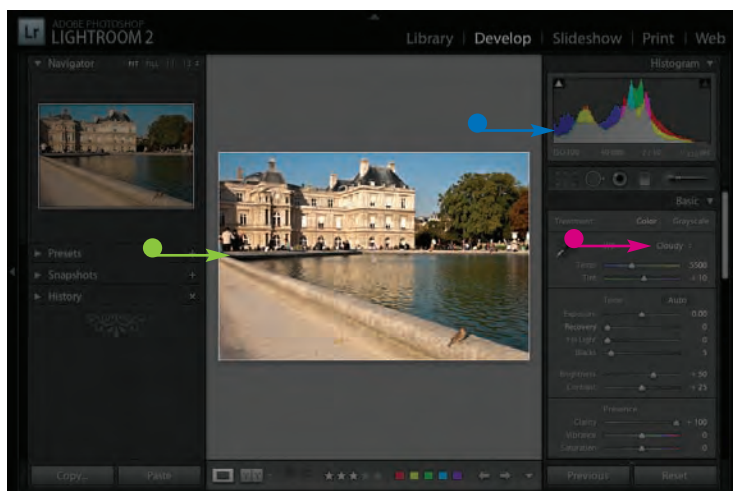
Adjust the White Balance

USE THE WHITE BALANCE PRESETS

- 1 Click a photo in the Filmstrip to open it.
- 2 Press **D** to go to the Develop module if necessary.
- 3 Click the **Basic** ▢ to expand the pane.
- 4 Click the **WB** ▢.
- 5 Click a white balance from the menu.



- The color in the image changes accordingly.
 - The selected preset is listed in the White Balance pane.
 - The histogram changes.
- 6 Repeat Steps 4 and 5 to view the results of other presets.
 - 7 Press **L** to dim the lights so you can see the results of the white balance adjustments against a dim or black background.

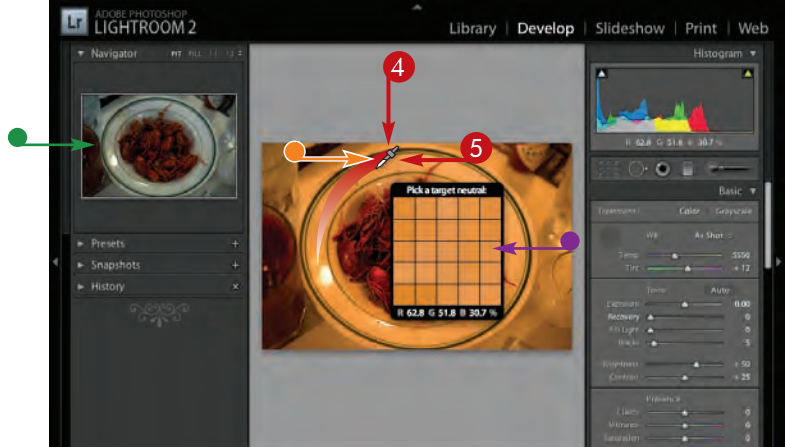


USE THE WHITE BALANCE SELECTOR

- 1 Repeat Steps 1 to 3.
- 2 Click the **White Balance Selector** (🔍).
- 3 Position the cursor over the photo.



- The cursor changes to the White Balance Selector tool (🔍).
- 4 Move the tool around the image.
 - The target area displays the range of colors under the tool.
 - The Navigator displays the different white balance changes in real time.
 - 5 Click an area that should be a neutral color, such as medium gray or white.



TIPS

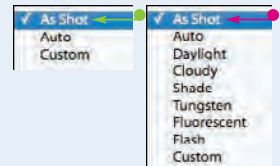
Why do some of my photos have color casts?

Each type of light has a color temperature. Although your eyes automatically compensate for lighting conditions and adjust so you see white objects as white, the camera sees the color of the light reflected by an object. You may have a yellow-orange cast in incandescent (tungsten) lighting and a greenish-blue cast in fluorescent lighting.



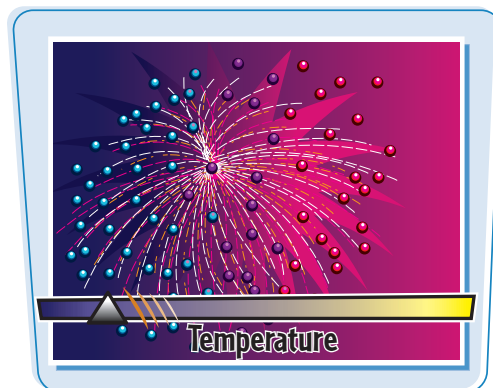
Is there a difference with JPEG and RAW files for white balance adjustment?

When using JPEGs in Lightroom, you are limited to three white balance presets (●). Also, because the camera writes the color temperature directly into the file for JPEGs, changing the white balance on a JPEG may introduce distorted or white pixels, called *artifacts*. With RAW files, the color temperature is written only into the metadata, making the RAW file more easily adjusted and customized with more presets (●).




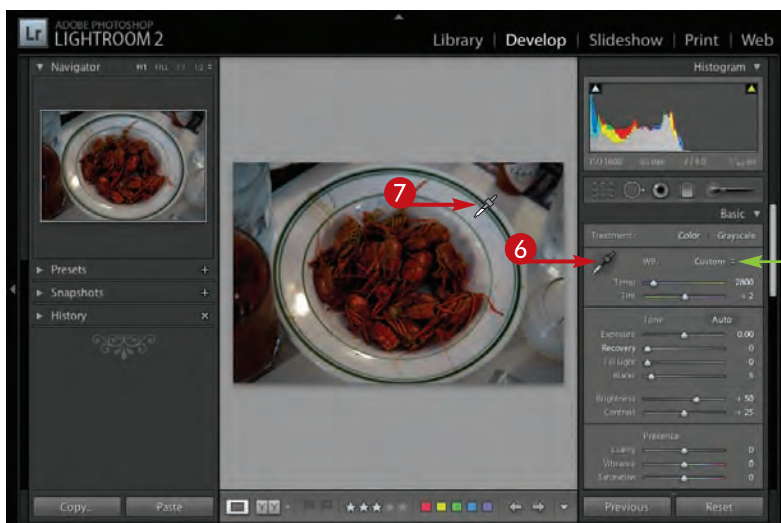
Adjust the White Balance (continued)

You can use a preset or use the White Balance Selector tool to establish a more neutral white balance or remove the color cast. You can then use the Temperature and Tint sliders to refine the white balance setting or even introduce a creative color cast for effect.



Adjust the White Balance (continued)

- The color in the image changes and the white balance shows Custom.
- 6 Click .
- 7 Position the tool over the neutral area in the photo without clicking.

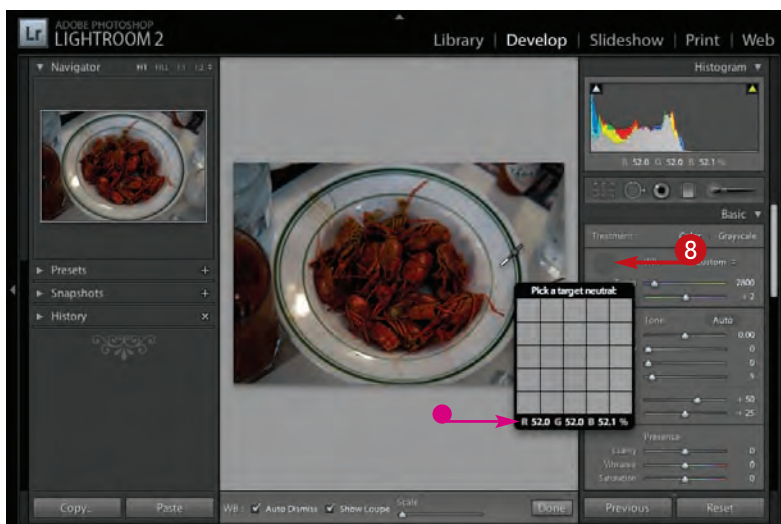


- The target area displays the RGB values.


Note: Look for close RGB numbers. An absolutely neutral color has identical RGB values.

- 8 Click in the White Balance Selector's circle in the right panel to return the tool and complete the adjustment.


Note: Optionally, you can click a different area in the photo to change the white balance setting again. Each time you click in the photo with the tool, the White Balance Selector automatically returns to the panel.



USE THE TEMPERATURE AND TINT CONTROLS

- 1 Repeat Steps 1 to 7 from either of the previous white balance adjustment subsections.
- 2 Click and drag the **Temperature**  to the left.

The colors appear blue or cooler.

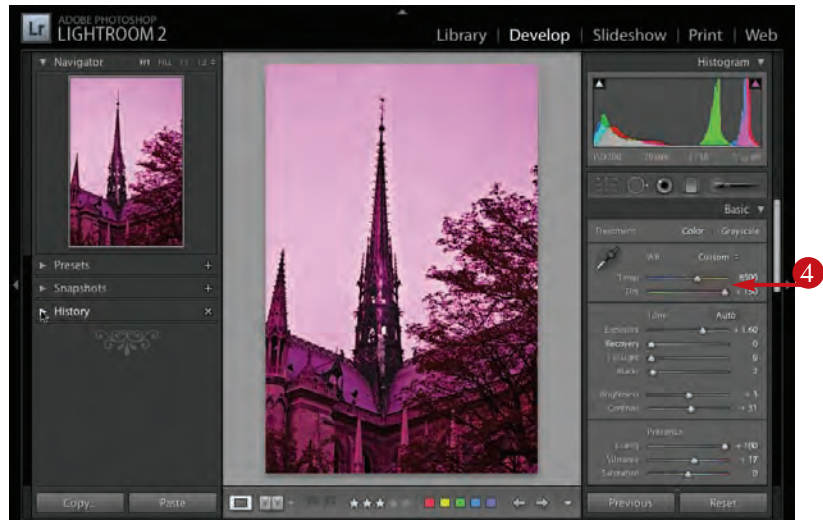
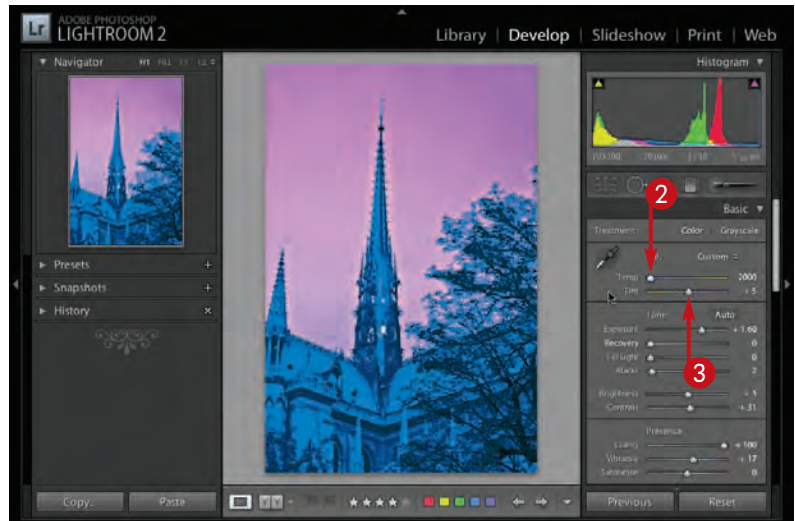
Note: Optionally, click and drag the **Temperature**  to the right to warm or make the photo more yellow.

- 3 Click and drag the **Tint** slider to the right.

The image takes on a magenta tint.

Note: Optionally, click and drag the **Tint**  to the left to add a green tint.

- 4 Double-click the **Temperature** and **Tint** sliders to reset them to their default setting.



TIPS

What is the difference between the white balance adjustments in the Develop module and the white balance adjustments in the Library module?

The white balance adjustments, like all the edits in the Develop module, are much more precise than those in the Library module, and offer more flexibility as well as more tools to refine the adjustment.

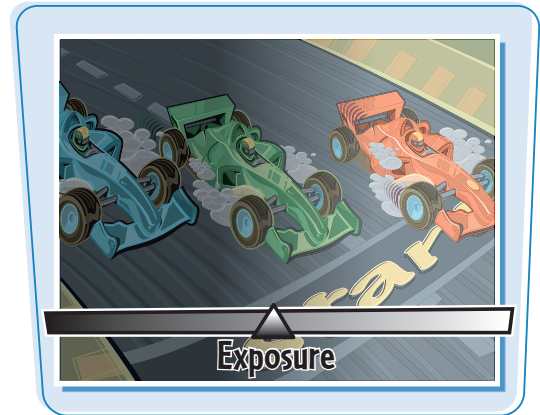
Is there a more precise way to select a neutral color in the photo?

Yes. Take the first photo of a series with the same lighting conditions including a spectrally neutral white-balance reference card, such as a **WhiBal** card (www.WhiBal.com) or a **GretagMacBeth ColorChecker** (www.xrite.com), in the shot. In Lightroom, set the white balance by clicking the card in the photo using the **White Balance Selector**. You can then click **Copy** to use the white balance setting from that photo. Click **Paste** to apply it to other selected photos.




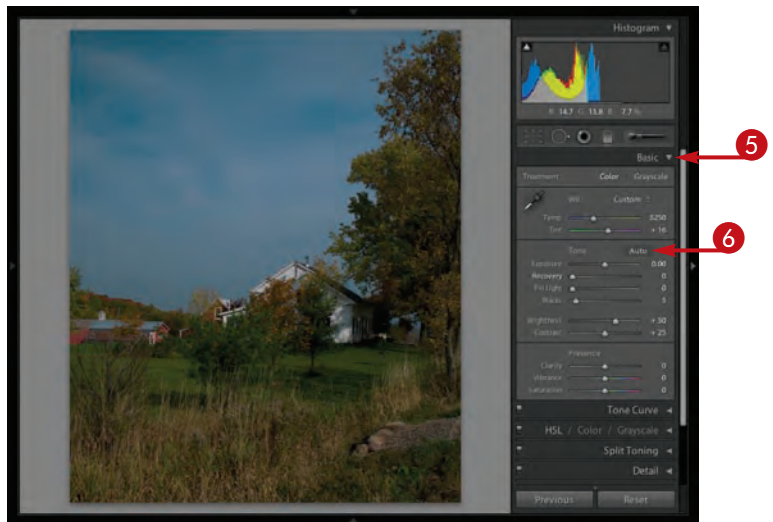
Modify the Basic Exposure

Adjusting the tonal values in the image is the next step to improving your image. Even with a properly exposed image, you may want to make creative adjustments to the photo. You can try the Auto setting or use the individual sliders directly to fine-tune the values starting with the Exposure setting. View the preview image as large as possible and always watch the histogram as a guide.




Modify the Basic Exposure

- 1 Click a photo in the Filmstrip.
- 2 Press **⌘ + Shift + F** (**Ctrl + Shift + F**) to go to full-screen mode.
- 3 Press **T** to hide the toolbar.
- 4 Press **F8** to view the right panel.
- 5 Click the **Basic** .
- 6 Click **Auto**.



- The preview image changes, as does the histogram.
- 7 If the Auto setting does not help the photo, press **⌘ + Z** (**Ctrl + Z**) to go back to the previous setting, and then continue with Step 9.
 - 8 If the Auto setting improves the photo, continue with Step 9 or any of the following tonal adjustment tasks.

- 9 Click and drag the **Exposure**  to the right to increase the exposure and lighten the image, or to the left to decrease the exposure and darken the image.

Note: Optionally, click the number for the Exposure value and type a specific setting.



The Exposure values change in the right panel and the image adjusts accordingly. The histogram also reflects the changes.

Note: You are adjusting the tones based on what you see in the preview window on your monitor. Make sure your monitor is calibrated and profiled as described in Chapter 5.



TIPS

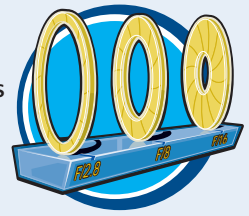
It appears that clicking Auto changes more than just the Exposure value.



Yes. The Auto feature resets the Exposure, Blacks, Brightness, and Contrast. Both the Recovery and Fill Light values are set to 0.

To what do the Exposure values correspond?

The numerical values for exposure in the Tone adjustments are approximately equivalent to the camera's f-stops. An exposure increase of +2 is similar to increasing the camera's aperture by two stops.






Make Precise Changes with the Tonal Adjustments Tools

You can adjust a photo to diminish or remove *clipped highlights* and lighten *clipped shadows* while still maintaining sufficient contrast. Clipped highlights are areas with no data, and they appear completely white in the photo. When you print a photo with clipped highlights, no ink is placed on the paper in those areas, making the print appear incomplete. Clipped shadows are areas that are black and print as solid black areas on the paper. Some clipped shadows are necessary to maintain contrast, depending on the aesthetics of the image and the subject matter.




Make Precise Changes with the Tonal Adjustments Tools


- 1 Click the **Histogram** .
- 2 Click the **Basic** .
- 3 Click both clipping warning triangles ().



The clipped highlights are marked in red and the areas of total black are marked in blue.

- 4 Click and slowly drag the **Recovery**  to the right to reduce the areas marked in red.

Note: Move the sliders slowly for more precise control, just far enough to reduce or remove the clipped areas.

- 5 Click and slowly drag the **Fill Light**  to the right to increase the light in the shadows.

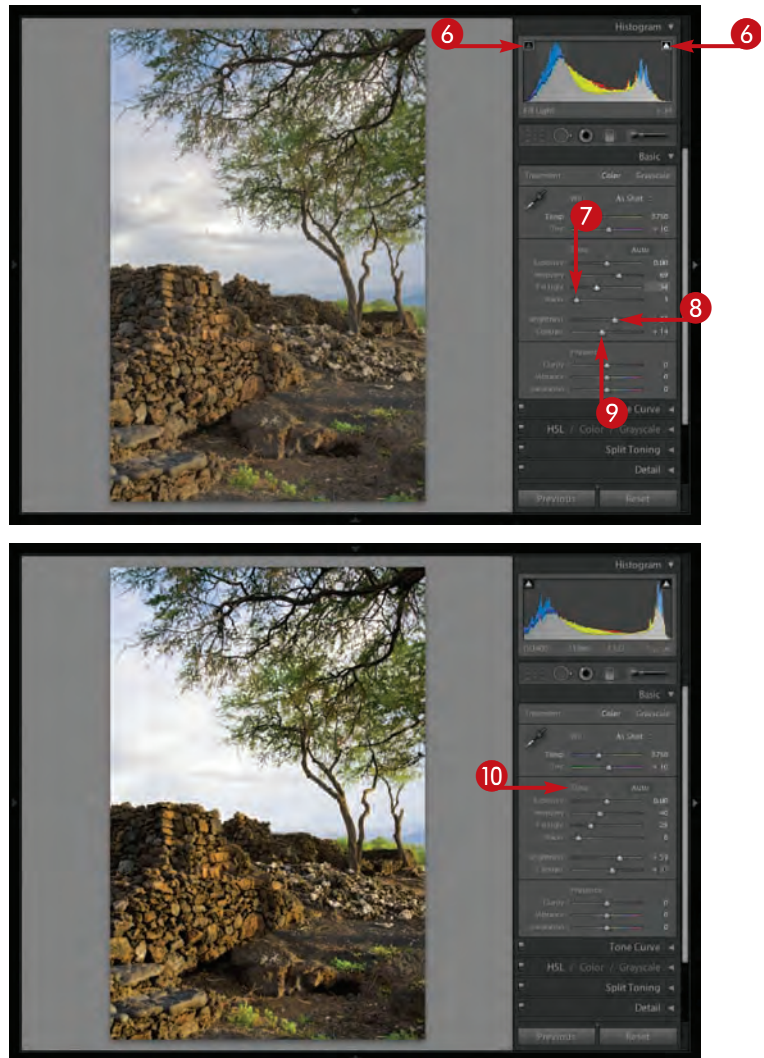


The image tones adjust accordingly and the extreme ends of the histogram move away from the edges.

- 6 Click both clipping warning triangles (▲) to turn off the warning colors.
- 7 Click and drag the **Blacks** ▲ to increase the areas that become black and visually enhance the contrast in the image.
- 8 Click and drag the **Brightness** ▲ if necessary to increase or decrease the overall brightness.
- 9 Click and drag the **Contrast** ▲ to increase the overall contrast.

Both the image and the histogram reflect the changes.

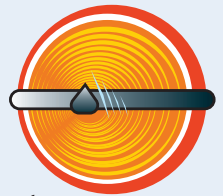
- 10 Double-click or **Option**+click (**Alt**+click) the word **Tone** to reset all the tonal changes to their original settings.



TIP

What tonal ranges are affected by each of the Tone sliders?

- Lightroom's Recovery slider recovers clipped highlights by slightly darkening the areas with little or no detail, and without affecting the rest of the image.
- The Fill Light slider opens up shadow areas to reveal more detail while minimizing the effect on the highlights.
- The Blacks slider darkens or even clips the darkest shadow areas to enhance the contrast.
- The Brightness slider lightens or darkens the images by redistributing the values in the midtones, minimizing any clipping in the highlights or shadows.
- The Contrast slider increases or decreases the overall contrast mainly in the midtones in the image without changing the extreme highlights or shadows.



Improve the Photo with Clarity, Vibrance, and Saturation

You can use the Clarity adjustment under the Presence pane to subtly increase the contrast in the midtones. The Vibrance slider lets you increase the intensity of the less saturated colors. Because clarity effectively adds mild sharpening, this adjustment should be applied when viewing your photo at 100%.


Vibrance also improves skin tones better than the Saturation setting, which saturates all the colors in the image.



Improve the Photo with Clarity, Vibrance, and Saturation

- 1 Follow the steps in the previous tasks to adjust the white balance and tone in the Basic pane.
- 2 Click **1:1** in the Navigator to view the image at 100%.

Note: Optionally, press **⌘** + **+** (**Ctrl** + **+**) to zoom in until you are viewing at 100%.



- 3 Click and drag the **Clarity**  slowly to the right.



The midtone contrast is increased and the edges are slightly sharpened.

- 4 Click **Fit** in the Navigator to view the full image.



- 5 Press **F7** to hide the left panel and enlarge the viewing area.
- 6 Click and drag the **Vibrance**  slowly to the right.
- 7 Click the **Saturation** value in the Presence pane and type **1** or **2** to increase the overall saturation slightly.
- 8 Press **T** if necessary to view the toolbar.
- 9 Click **Before/After Left/Right**  once to view the images left and right, or twice to view the images top and bottom.

The Before and After views are shown one above the other.

- 10 Click and drag the **Vibrance** and **Saturation** sliders to adjust the settings.


Note: Optionally, click and drag any of the tone sliders to adjust the previous settings.

Note: The Clarity and Vibrance adjustments can be very subtle enhancements, even viewed at 100%. Adjusting the saturation causes more dramatic shifts in color.



TIPS

How can I reset just one slider to its original position?

You can reset just one slider in the group by either double-clicking the slider's name, such as **Clarity**, or by double-clicking the slider .



Do these adjustments affect the previous edits I made?

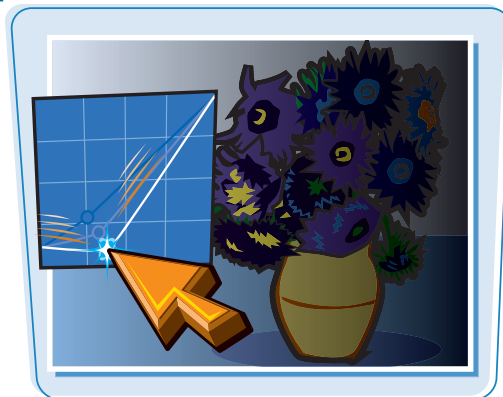
Lightroom's adjustment tools are organized in a logical order to help you redistribute the tonal values in an image while preserving the widest tonal range possible; however, changing one setting may affect a previous edit, so you may need to readjust a setting as you continue improving a photo.



Make Controlled Tone Curve Adjustments

Lightroom's tone curve provides advanced adjustments similar to Curves in Photoshop and Adobe Camera Raw but with more intuitive controls. You can refine the adjustments made in the Basic pane by changing the tone curve three different ways: clicking and dragging directly on the curve, moving the sliders, and using the Targeted Adjustment tool on the photo. You can also limit the range of tones you adjust.

Tonal adjustments depend on your image and your aesthetic vision.

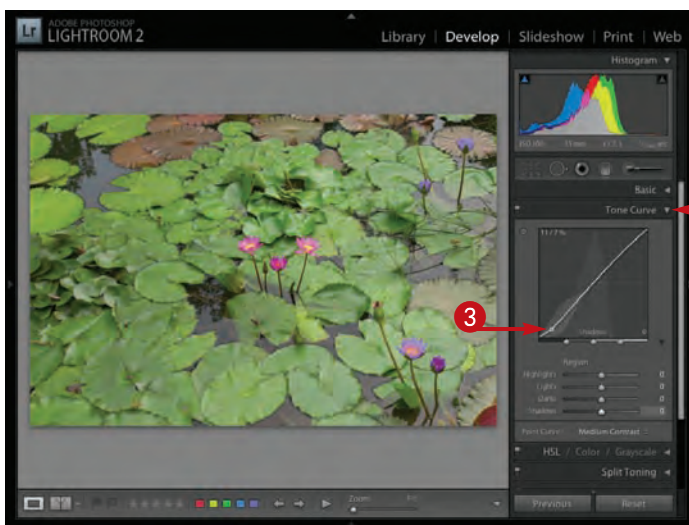


Make Controlled Tone Curve Adjustments

Note: This task demonstrates only where to find and how to use the tools.

DIRECTLY ADJUST THE TONE CURVE

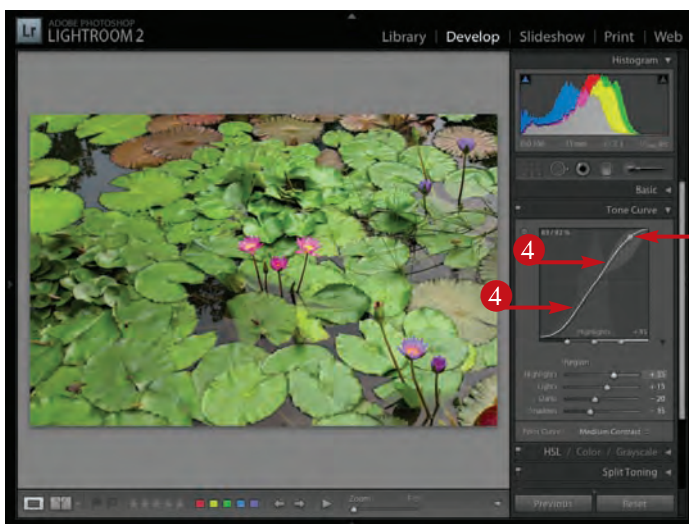
- 1 Arrange Lightroom's interface as in a previous task to show a large viewing area and the right panel.
- 2 Click the **Tone Curve** icon.
- 3 Click the curve in the bottom left area of the graph representing the shadows, and drag down.



The curve bends and darkest shadows in the photo get darker.

- 4 Repeat Step 5 on other areas in the graph to increase or decrease the highlights on the top right of the graph, or the midtones, the darks and lights, in the center of the graph.

Note: Optionally, with the cursor over an area on the curve, use and to move the curve.

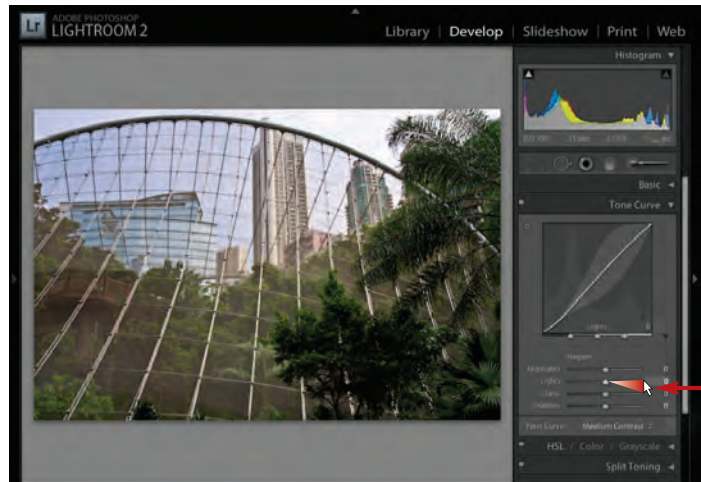


USE THE TONE CURVE SLIDERS

- 1 Click the **Lights**  and drag to the right.

The light midtones are lightened.

- 2 Repeat Step 1 on the other sliders.



- The tones in the areas affected by the specific sliders are lightened or darkened accordingly.

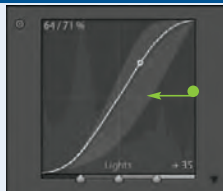
Note: Darks and Lights affect the middle regions representing the midtones on the curve. Highlights and Shadows affect the outer edges of the tonal range.



TIPS

What is the ghosted region that appears on the curve when I move a point?

This grayed area (●) indicates the limits in which the current slider can affect the curve and the tones in that range. Unlike curves in other applications, Lightroom's tone curve restricts the maximum changes you can make and protects the user from ruining a photo. You can use the grayed area as a guide for improving the tones in your image.



How can I reset the tone curve adjustments?

You can reset the curve many ways. Double-click the word **Region** to reset all the sliders. Also, **Option**+clicking (**Alt**+clicking) the word **Region** changes it to **Reset Region**, and then clicking **Reset Region** resets all the sliders. You can **Control**+click (right-click) directly in the graph area and click one of the reset options in the contextual menu that appears. Double-click a slider's name or the slider (▲) to reset that individual slider.





Make Controlled Tone Curve Adjustments *(continued)*

The tone curve is more precise than the Brightness and Contrast sliders in the Basic pane. Using the Targeted Adjustment tool to click directly on areas of the image gives you more control over which areas are changed. You can also use the sliders at the base of the graph to limit the areas, or range of tones, affected by each region slider. For example, moving the right slider under the graph more to the right limits the effect of the Highlights slider to the brightest areas of the image.




Make Controlled Tone Curve Adjustments *(continued)*

USE THE TARGETED ADJUSTMENT TOOL

- 1 Click the **Targeted Adjustment** tool .
- 2 The cursor changes to the Targeted Adjustment tool .
- 3 Click and drag up or down directly on the photo.
- 4 Move the cursor to another area.
- 5 Click and drag up or down depending on the image.





- The values in the area under the tool change, as do the curve and the sliders in the right panel.

- 5 Click  to stop using the tool and return it to the Tone Curve pane.



CHANGE THE AREAS AFFECTED BY THE REGION SLIDERS

- 1 Click the rightmost  at the base of the graph.
- 2 Drag it slightly to the right.
- 3 Click and drag the **Highlights**  to the right.




Only the lightest highlights are affected.

- 4 Repeat Steps 1 to 3 to limit the changes to other tonal regions on the curve.

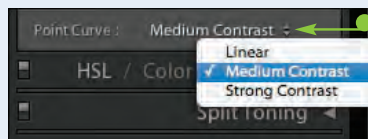


TIPS


What does the Point Curve arrow change?

Clicking the **Point Curve**  offers three options. Medium

Contrast is the default Point Curve setting. Linear creates a perfectly straight line and shows no curves adjustments, and Strong Contrast boosts the contrast in the photo. The setting you choose changes the curve but not the region sliders. If you import a photo and its metadata previously edited with the Adobe Camera Raw curve, the Point Curve option shows Custom, and the curve itself displays the custom edits.



Is there an easy way to see the effect of the tonal adjustment?

Yes. You can click the **Tone Curve**  to switch the Tone Curve effects on and off. You can use similar on/off switches to preview the effect of the changes for other adjustments in the right panel.



Explore the HSL/Color/Grayscale Tools

The HSL/Color/Grayscale pane of the right panel is a powerful three-part color adjustment tool. You can view each section of the Hue Saturation and Luminance pane separately, or all at once if your monitor size allows. The Color and Grayscale sections each let you target specific color values to control every area of the image.



HSL Tools

The Hue sliders (●) change only the specific color associated with each of the eight sliders. The Saturation sliders change the vividness of the selected color. You can saturate or desaturate specific colors individually. The Luminance sliders change the brightness of each color individually. You can selectively brighten or darken one or more colors.



Viewing the HSL tools

You can click **Hue**, or **Saturation**, or **Luminance** to view only those sliders, or you can click **All** (●) to view all three HSL tools at once. When they are all displayed in the pane, you can click one of the HSL names once to reduce the sliders back to just that specific group.



Color

You can click **Color** to selectively adjust the hue, saturation, and luminance of one specific color. Click any one of the eight color boxes (●) at the top of the pane to adjust the corresponding sliders. Click **All** to view all the colors grouped by color.



Grayscale

The Grayscale section is a grayscale mixer for controlled conversions from color to black and white. Clicking **Grayscale** automatically displays a black-and-white preview, although the photo remains an RGB image. Click **Auto** (●) as a starting point. Use the sliders to fine-tune the conversion by brightening or darkening specific color areas to creatively affect the grayscale tones.

Using the HSL/Color/Grayscale Adjustment Tools

You can use the sliders to apply each adjustment or click and drag directly in the image using the **Targeted Adjustment** tool (⦿). Reset individual sliders (●) by double-clicking the slider's name or ●. You can reset any group of sliders by **Option**+clicking (**Alt**+clicking) the name of the group. Click the ■ to view the effects of your edits.




Adjust Individual Color Ranges

You can selectively adjust individual colors by hue, by saturation, or by the overall brightness of the color. For example, if an object or an area appears too dull or too vivid, you can adjust the sliders for the specific color. You can also use these tools creatively, changing the existing colors or the intensity to give a photo a totally different look.



Adjust Individual Color Ranges

ADJUST THE HUE, SATURATION, AND LUMINANCE WITH THE TARGETED ADJUSTMENT TOOL

- 1 Arrange Lightroom's interface to show a large viewing area and the right panel.
- 2 Click the **HSL/Color/Grayscale**  in the right panel.
- 3 Click **All** to display all three sets of sliders for Hue, Saturation, and Luminance.

The pane expands.

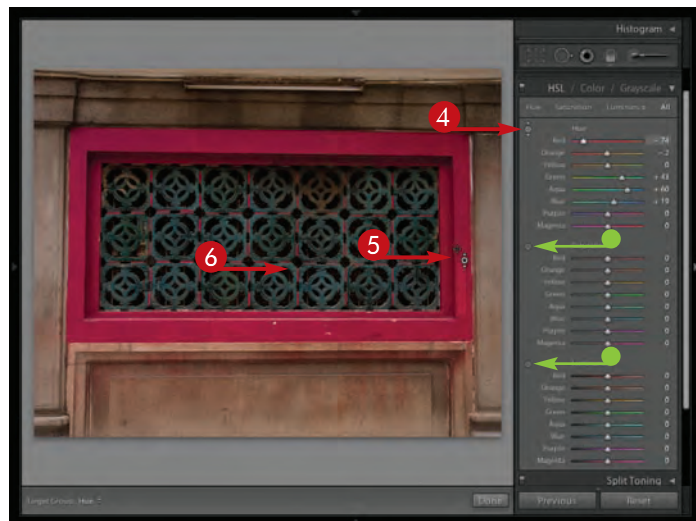
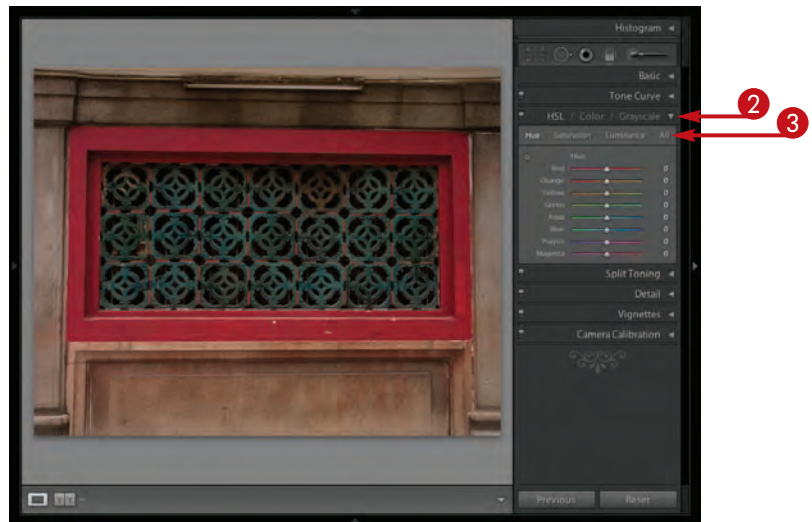
- 4 Click the **Targeted Adjustment** tool  in the Hue section ( changes to ).

- 5 Move the cursor over a colored area and drag up or down to adjust the hue.

The hue changes in the image and the corresponding sliders in the Hue pane move to one side or the other.

- 6 Repeat Step 5 by clicking and dragging in a different colored area.

- You can also click the Targeted Adjustment tool in the Saturation and Luminance sections and click and drag in the colored areas to adjust the color's saturation and luminance.



ADJUST THE COLORS WITH THE COLOR PANE SLIDERS

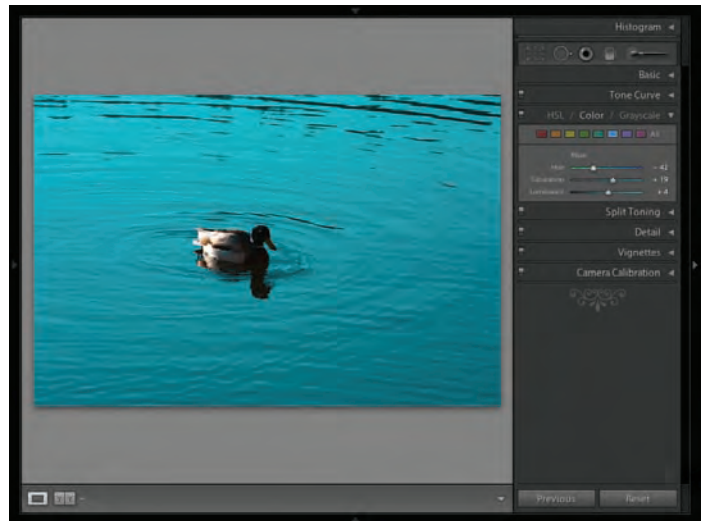
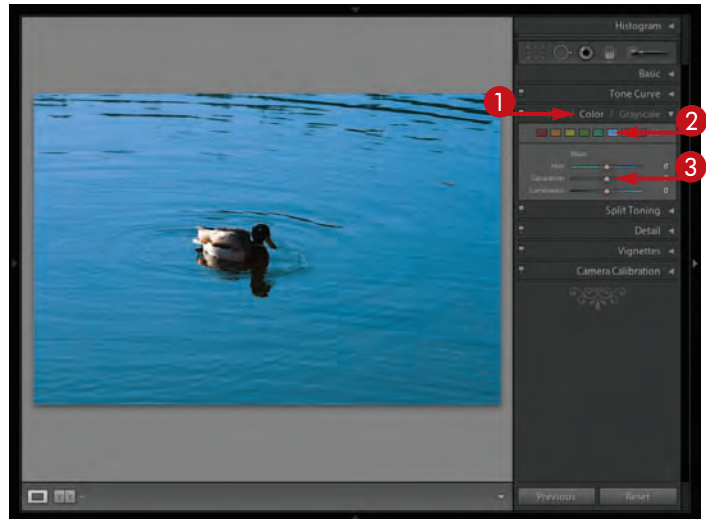
- 1 With another photo selected, click **Color** in the HSL pane.

The Color pane expands.

Note: Clicking **All** expands the Color pane to display all the color boxes at once.

- 2 Click a color box to select it.
- 3 Click and drag each slider to adjust the Hue, Saturation and Luminance for that color to change the image.

The characteristics of the selected color in the image change accordingly.



TIP

Why is there both an HSL and a Color pane? Do the Color pane tools produce the same effect as the tools in the HSL pane?

Yes. The adjustments you make using the tools in the Color pane affect the photo the same way the adjustments you make using the tools in the HSL pane. The two sets of tools are organized differently so you can work the way you prefer. In the Color pane, you click the color box of the color you want to modify, and then adjust the hue, the saturation, and the luminance of that color. In the HSL pane, all the sliders for hue are grouped together, as are the sliders for saturation and luminance for each color. In both panes, you can view just one group or click **All** to view all the sliders and colors at once.



Creatively Convert a Color Image to Black and White

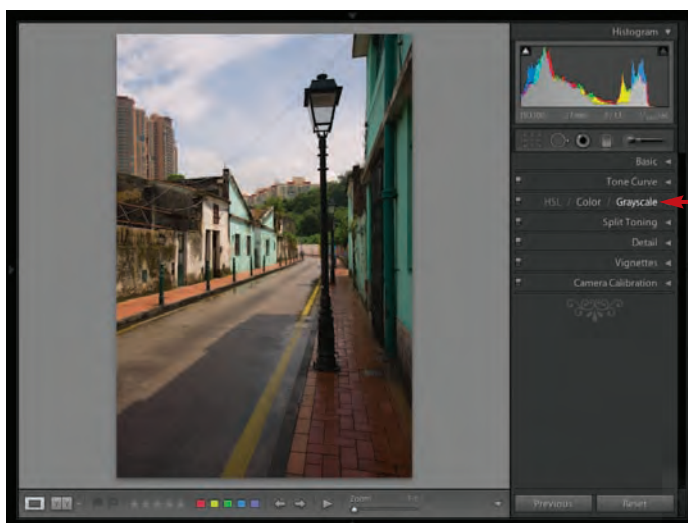
Although you can apply a preset in either the Library or Develop module to convert a color photo to black and white, the Grayscale pane of the right panel offers more options for creating a unique black-and-white photo. You can also specifically control the individual tones in the final image with the sliders or the Targeted Adjustment tool.



Creatively Convert a Color Image to Black and White

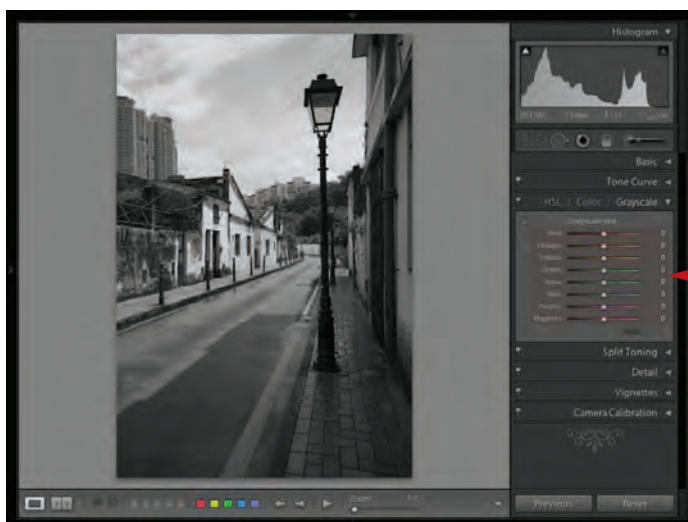
- 1 Arrange Lightroom's interface to show a large viewing area and the right panel.
- 2 Click **Grayscale** in the right panel.

Note: You can also start with a preset and then use the Grayscale pane to make custom adjustments.




The Grayscale pane opens and the photo automatically appears black and white in the main viewing area.

- 3 Click and drag any of the sliders to adjust the grayscale tones.



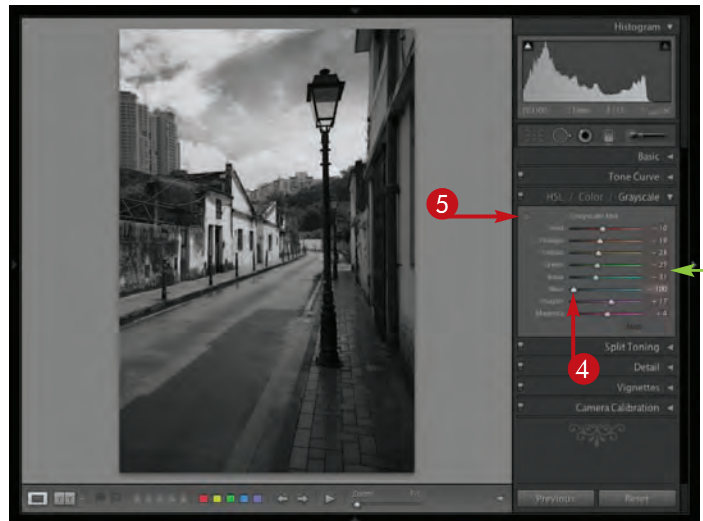
- The tones in the image vary and the Grayscale Mix sliders adjust.


- 4 Click and drag the **Blue**  to the left.

Note: The selection of sliders and the direction to move them depends on your photo.

The levels of gray in the sky and other blue areas increase.


- 5 Click .

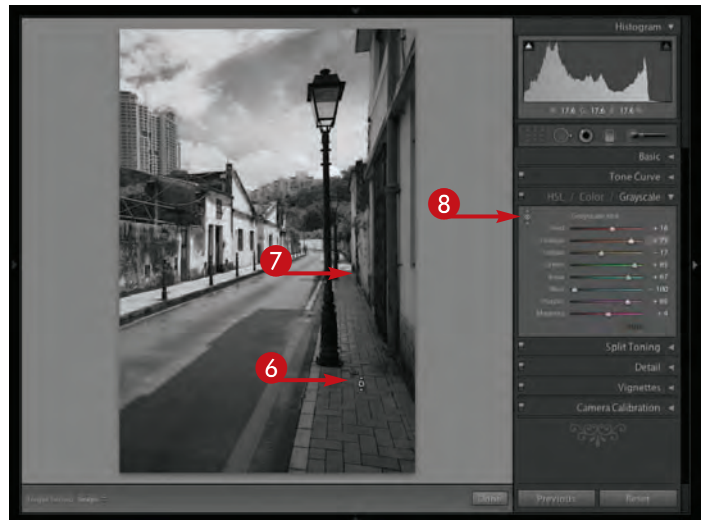


The cursor changes to the Targeted Adjustment tool ()

- 6 Position the cursor over a specific area in the photo.
- 7 Click and drag in the image.



The areas in the color image below change, creating different grayscale values.

- 8 Click  to return the tool to the Grayscale pane.



TIPS

Why did all the tools disappear from the toolbar below the main viewing area when I clicked the Targeted Adjustment tool?

When you use the **Targeted Adjustment** tool () , the toolbar options change. You can click **Done** in the toolbar to stop using the Targeted Adjustment tool. The previous toolbar tools reappear. You can also quickly switch back to another adjustment pane by clicking the **Target Group**  and selecting **Tone Curve**, **Hue**, **Saturation**, or **Luminance**.



How can I revert my grayscale photo to a color image?

You can click **HSL** or **Color** to return to a color image, click **Color** in the Basic pane, or use the History pane in the left panel to step backwards. If you **Option**+click (**Alt**+click) **Grayscale Mix**, the photo returns to the default grayscale and enables the Auto button. Clicking **Auto** applies a grayscale mix that distributes the gray tones as much as possible for that image.



Tone an Image

Whether you tone black-and-white images or color photos, Lightroom opens more creative possibilities with the Split Toning pane in the Develop module. You can simply tint a photo or even simulate the chemical cross processing techniques used with film in a traditional darkroom. You can also give the image a unique tone for a different effect.

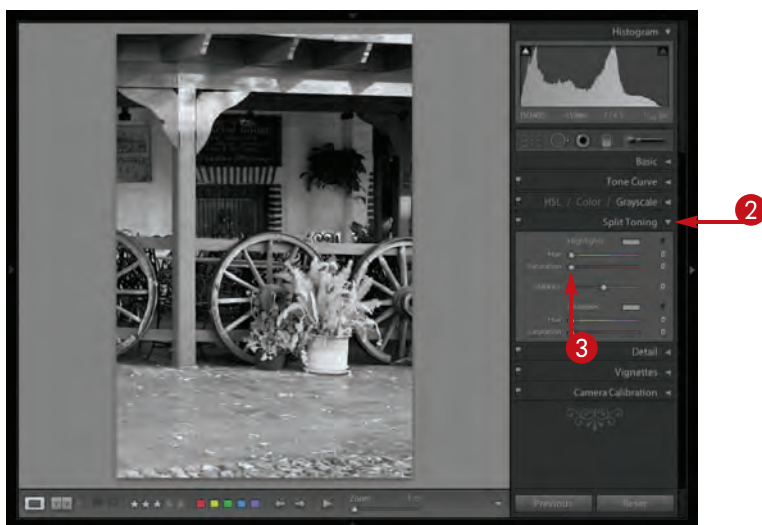


Tone an Image

- 1 Repeat the steps in the previous task to create a custom black-and-white photo.

Note: Optionally, apply the steps in this task starting with a color photo.

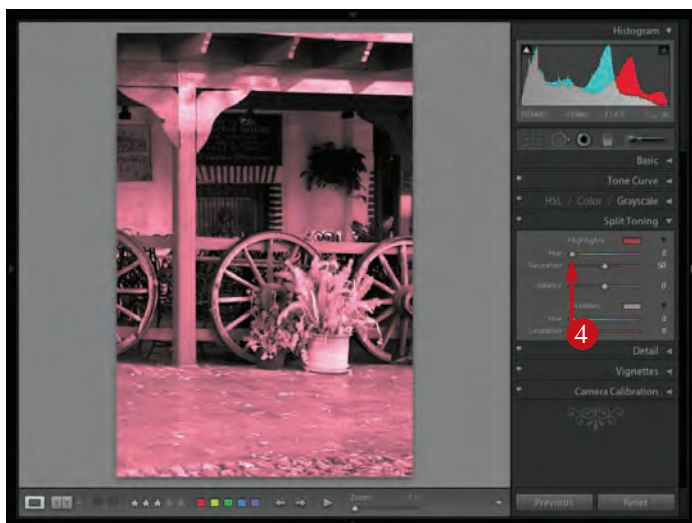
- 2 Click the **Split Toning** icon.
- 3 Click and drag the **Highlights Saturation** to 50.







The photo appears tinted.

- 4 Click and drag the **Highlights Hue** to the right to select a tone color.

Note: Try using warm tones for highlights and cooler tones for shadows.



The tint color changes.

- 5 Click and drag the **Shadows Hue**  to the right to select a tone color.
- 6 Click and drag the **Shadows Saturation**  to 50.
- 7 Click and drag the **Balance**  to the left to increase the effect of the Shadows color.
- 8 Click and drag the **Balance**  to the right to increase the effect of the Highlights color.



The balance of highlights and shadows colors changes as you move the slider.

- 9 Click and drag both **Saturation** sliders to get the final effect.

Note: Optionally, continue to adjust the sliders in any order. Go back and forth until your photo has the look you want. You can also open any of the other panes to continue editing the tones.



TIPS

Why should I start with the Saturation sliders?

When Saturation is set to zero, the hue changes have no effect on the image. If you press and hold **Option** (**Alt**) as you change the hues, Lightroom displays the effect of full saturation so you can see which areas of the photo will be toned.

How can I use the color squares in the Split Toning panel?

Clicking the color square in the Split Toning pane opens the color selector. You can click and drag (●) in the selector to find the toning color you want, and the main viewing area previews the color applied to the photo.



Brush On a Localized Adjustment

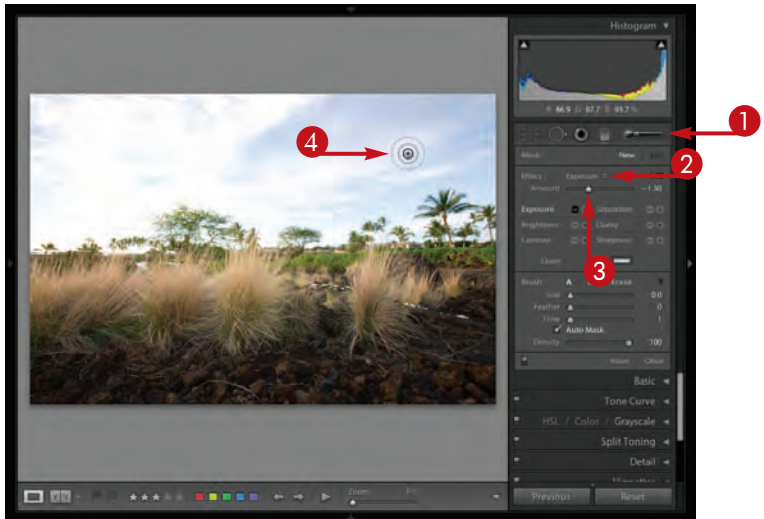
Lightroom includes an Adjustment Brush tool so you can paint specific areas of the image and effectively dodge, burn, saturate, desaturate, adjust exposure, and more. You can set options for two different brushes, labeled A and B, and paint with each brush for different edits. You can also click New to create new brush settings for either brush and then brush on the new adjustments on any area.



Brush On a Localized Adjustment

ADJUST A LARGE BACKGROUND AREA

- 1 Click the **Adjustment Brush** (🖌️).
- 2 Click the **Effect** (⌵) and select **Exposure**.
- 3 Click and drag the **Amount** (🔼🔽).
- 4 Position the cursor over the image, but do not click.



● The cursor appears here.

- 5 Click and drag the **Size**, **Feather**, and **Flow** sliders to adjust the size of brush A.
- 6 If necessary, click **Auto Mask** (☑️) changes to (🔍).

Note: Auto Mask prevents adjustments from being brushed on certain areas. The tool separates edges it sees as different from the area selected with the adjustment pin. By deselecting or turning off the Auto Mask feature in a photo with irregular edges such as trees against a large sky, you can brush on the adjustment more uniformly, and then erase areas from the adjustment, as in the steps that follow, to create a smoother look.



- 7 Click the area to edit in the image.

The clicked area is marked by a local adjustment pin (📌).

- 8 Click and drag over the area to be adjusted using the cursor as a paint brush.

• The exposure in the painted area is changed.

• Once you apply a brush, a mask is created and the Mask mode changes to Edit, indicating the selected mask can be changed.

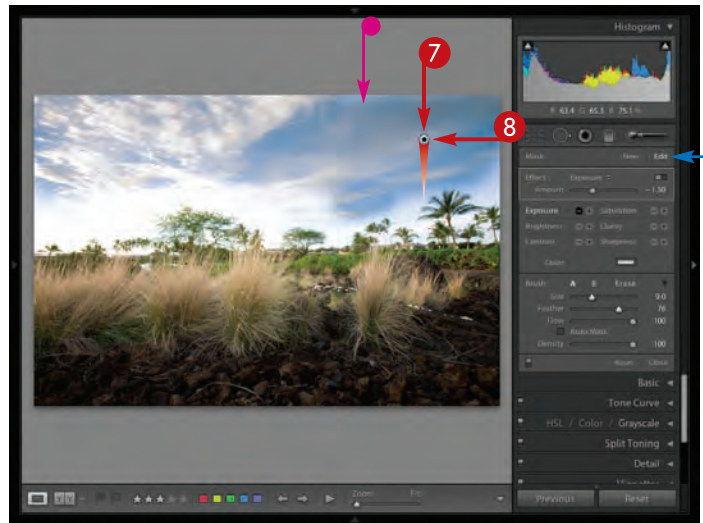
- 9 Repeat Step 5 to make the brush smaller.

- 10 Repeat Step 8 to continue painting more areas.

- 11 Position the cursor over (🔍).

The painted areas appear as a red mask and show over-painted areas.

- 12 Press **Option** (Alt).



TIPS

How can I see the areas to erase if the red mask disappears when I move the cursor away from the Adjustment pin?

You can click (🔍) to show all the sliders. Then exaggerate the Exposure Effect by moving the (🔍) completely to the left, which darkens all the painted areas so you can see where you need to erase. Alternatively, you can click the color box when viewing all the sliders and selecting a bright color for the painted areas. When you finish painting and erasing, click in the color box again and change it back to white to remove the tint.



Is the Local Adjustment tool only good for adjusting landscape photographs?

No. The Adjustment Brush is particularly useful to soften skin in a portrait. Click the Adjustment Brush tool to expand the tool pane. Click the **Effect** (🔍) and select **Soften Skin**. Paint over the skin areas avoiding the eyes, nostrils, and lips. The Skin Softening Effect softens the skin by modifying both the Clarity and Sharpness adjustments.

Brush On a Localized Adjustment (continued)


Because you are actually creating a mask when you use the Adjustment Brush, you can edit any adjustments after they are applied by changing the parameters. You can also use localized adjustments to add focus or other creative elements by desaturating some parts of the photo and leaving just some areas colored.





Brush On a Localized Adjustment (continued)

The cursor changes to .

- 13 Click and drag, holding **Option** (**Alt**) to paint over any areas to remove the mask.

- 14 Click and drag to the left or right directly on the Adjustment pin () to increase or decrease the exposure in the brushed areas.

Note: Optionally, click and drag the **Amount**  to adjust the Exposure.

- 15 Click  to show all the Effect sliders.

All the Effects sliders appear.

- 16 Click and drag any of the sliders to adjust the settings for the painted areas.
- 17 Click **New**.
- 18 Repeat all the steps to apply a new set of adjustments to another area.

Note: Optionally, click any Adjustment pin () and press **Delete** (**Delete** or **Backspace**) to delete the adjustment and the pin.



USE THE AUTO MASK FOR CREATIVE LOCALIZED ADJUSTMENTS

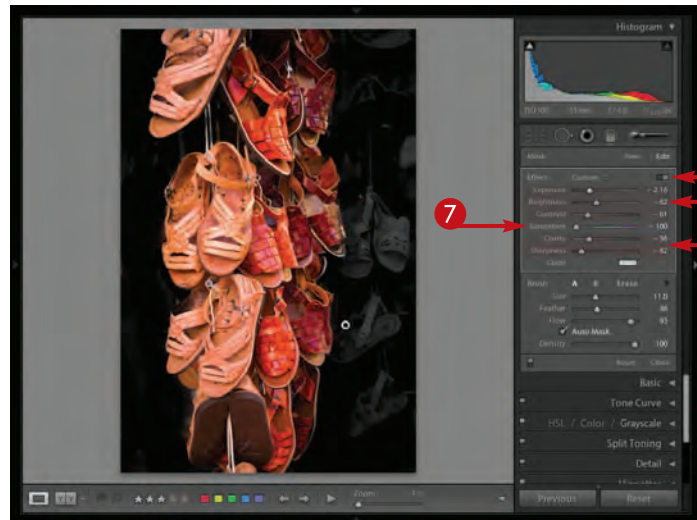
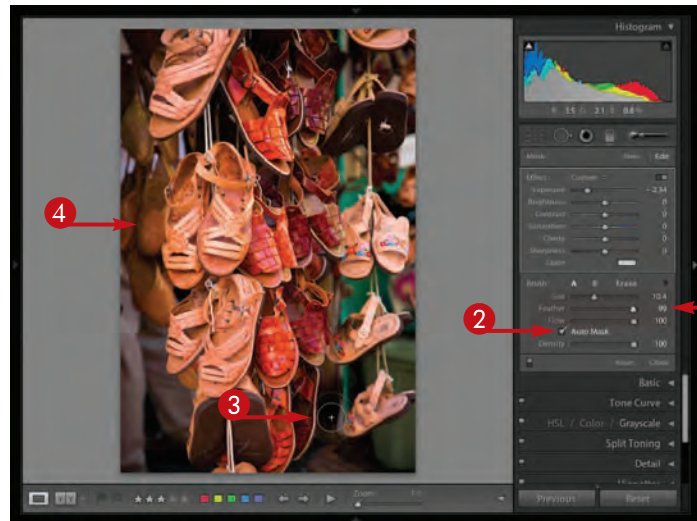
- 1 Repeat Steps 1 to 5 in the first part of this task.
- 2 Click **Auto Mask** (☐ changes to ☒.
- 3 Click the area to edit in the image.
- 4 Click and drag over the area to be adjusted using the cursor as a paint brush.

Note: It is important to keep the center of the brush ring on the outside edge of the area to be preserved.

- 5 Readjust the **Size**, **Feather**, and **Flow** sliders of the brush as you paint closer to edges.
- 6 Click ☐ to show all the Effect sliders, if necessary.
- 7 Click and drag the **Saturation** ☐ to the left.

The painted areas appear grayscale.

- 8 Click and drag the other **Effect** sliders to alter the photo.



TIPS

Why do I get little halos around some areas as I apply the brush?

With Auto Mask checked, the Adjustment Brush looks for contrast edges and tries to paint around them. Click **AutoMask** to uncheck it and turn it off (☒ changes to ☐) as you paint to cover these areas.



What do the Brush controls mean?

- Feather creates soft-edged transitions between brushed areas and the surrounding pixels.
- Flow controls the amount of the adjustment.
- Auto Mask limits the brush strokes to areas of similar color.
- Density controls the amount of transparency in the brushstrokes.
- A and B keep the options of two separate brushes until you change them. Click **A** to set one brush and click **B** to set a second style. Press **/** to change brushes.



Add a Localized Graduated Filter

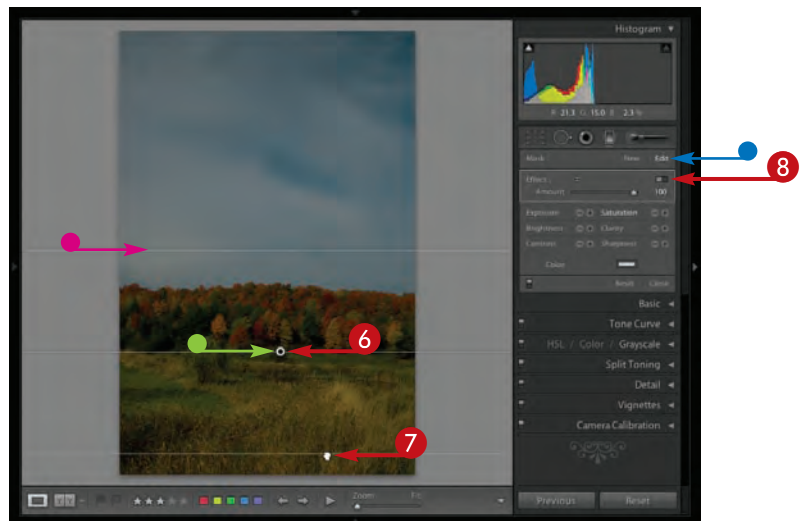
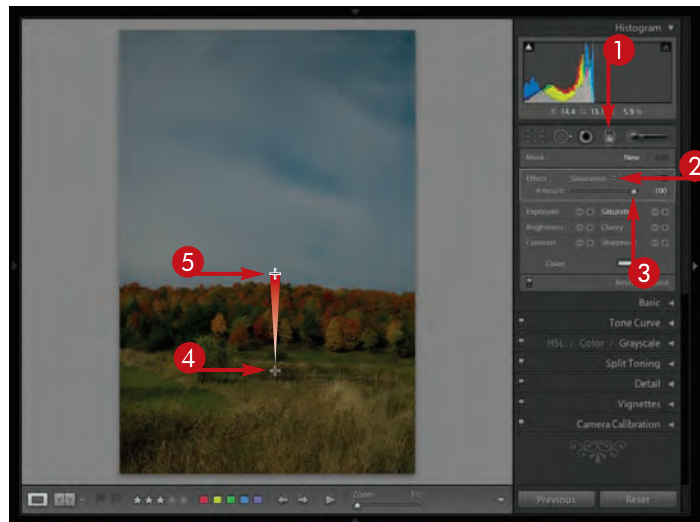
You can use the Graduated Filter tool to apply adjustments as a uniform gradient across a region in an image. You can add a sunset effect to a landscape or add light at an angle. Like the Adjustment Brush tool, the Graduated Filter requires some practice and experimentation. Both localized adjustment tools let you push your own creative boundaries.



Add a Localized Graduated Filter

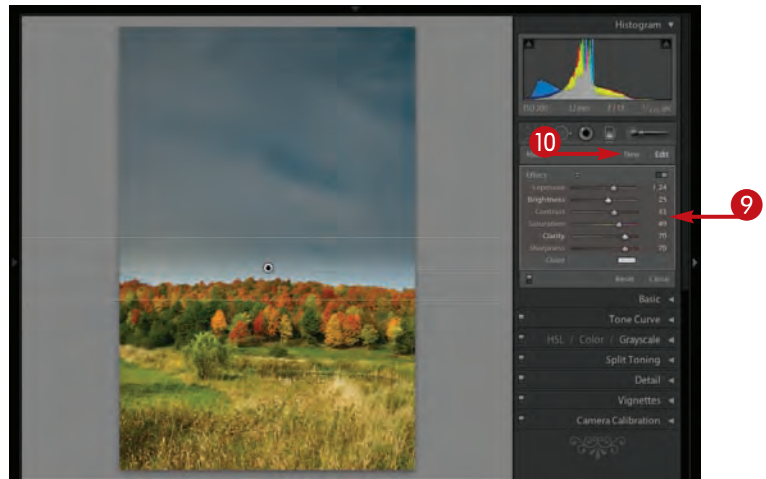
- 1 Click the **Graduated Filter** tool (▨).
- The Graduated Filter tool pane opens.
- 2 Click the **Effect** (⌵) and select **Saturation**.
- 3 Click and drag the **Amount** (▢) to 100.
- 4 Position the cursor (⊕) over the image.
- 5 Click and drag from the bottom of the image upward.

Note: Optionally, press **Shift** to constrain the angle, making the gradient blend in a straight perpendicular or vertical line.

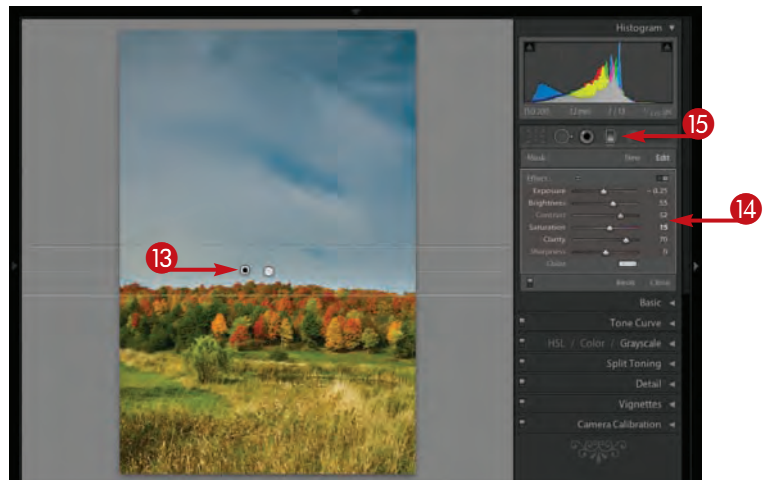


- The Local Adjustment pin (📌) appears, indicating the center of the effect.
 - Parallel lines indicate the high and low extents of the gradient.
 - The Mask mode changes to Edit.
- 6 Click (📌) to move the center of the adjustment.
 - 7 Click and drag the top or bottom line to change the range of the adjustment.
 - 8 Click (▨) to show all Effect sliders.

- 9 Click and drag the other **Effect** sliders to edit the adjustment.
- 10 Click **New**.



- 11 Repeat Steps 2 to 9 to add another Graduated Filter adjustment.
- 12 Press **H** to toggle on and off the pins and view the image without the Adjustment pins.
- 13 Click to select a pin.
- 14 Click and drag the **Effect** sliders to edit the parameters of the adjustment.
- 15 Click the **Graduated Filter** tool to stop using it.



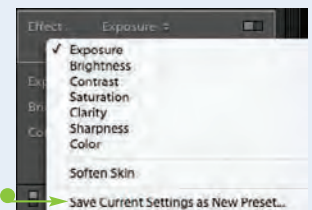
TIPS

Can I apply a Graduated Filter and then use the Adjustment Brush to change specific areas?

Yes. Although the Adjustment Brush cannot edit a Graduated Filter adjustment, you can apply multiple adjustments one on top of the other, so you can selectively change a section of the photo that already has a graduated adjustment applied.

Can I create a preset of my own settings for an Adjustment Brush or a Graduated Filter?

Yes. You can save presets for both types of localized adjustment tools. Apply the effects you want and click the **Effect** ▾. Select **Save Current Settings As New Preset** (●). Type a name in the Preset Name dialog box and click **Create**. Your preset now appears in the Effect menu. The saved settings include all the adjustment effects and the values for either tool, but not the Size, Feather, and Flow of the Adjustment Brush tool.



Reduce Digital Noise in the Image

Digital noise refers to the extraneous pixels that may be visible in a photo viewed at full resolution and can be both Luminance noise, which makes an image look grainy, and Color noise, which adds specks of different color mostly in shaded areas. All digital cameras produce some noise; however, the smaller the camera sensor the greater the chance of noise in the image.

Noise Reduction and Sharpening are interconnected tools: Changing one setting affects the results of the other.



Reduce Digital Noise in the Image

- 1 Click the **Detail** .

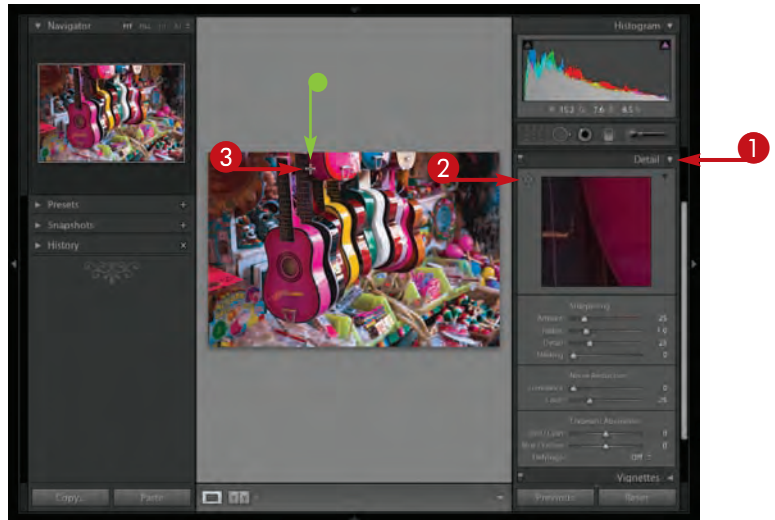
Note: The default color noise reduction value of 25 is automatically applied but may not be correct for your photo.


- 2 Click **Detail Zoom Area** .

● The cursor  changes to .

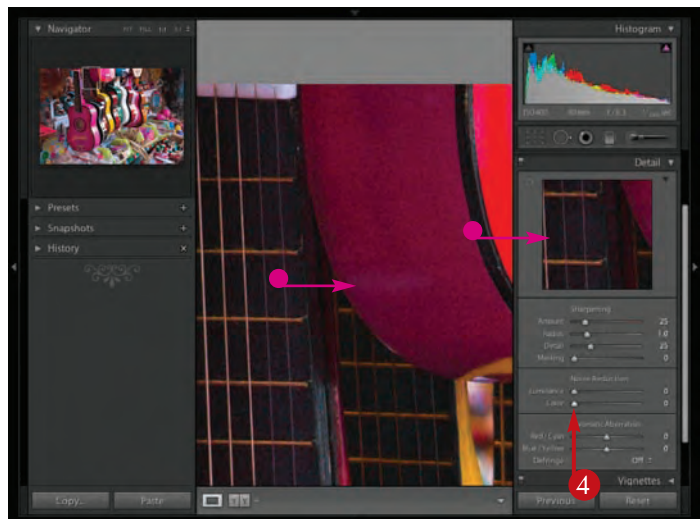
- 3 Move the cursor over the image to change the area displayed at 1:1 in the detail panel.



Note: Optionally, press  +  (Ctrl + ) to view the image at 1:1 in the main viewing area.

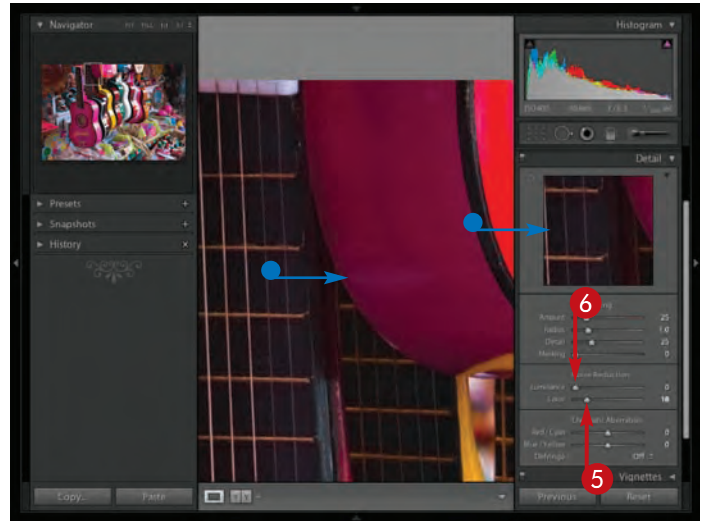


- 4 Click and drag the **Color**  completely to the left.

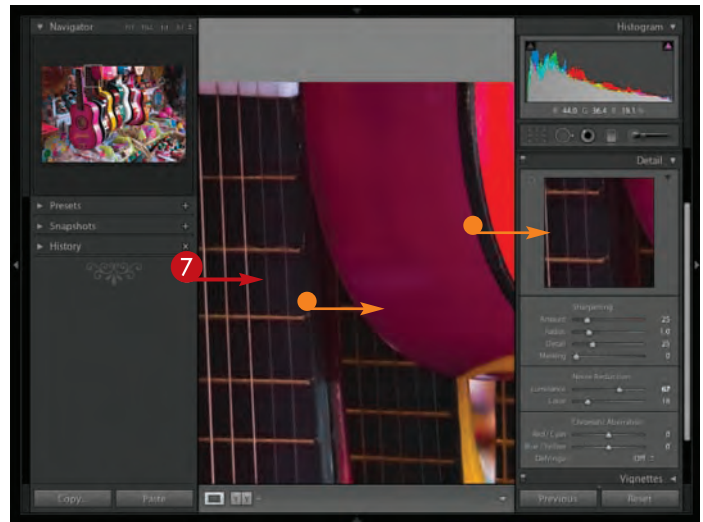
● The noise appears more obvious.



- 5 Click and drag the **Color**  slowly to the right just until the noise almost disappears.
- The amount of noise is reduced.
- 6 Click and drag the **Luminance**  slowly to the right, just until the grainy appearance is diminished.



- The noise becomes much less apparent.
- 7 Click and drag in the main preview image to check the image detail in other areas.



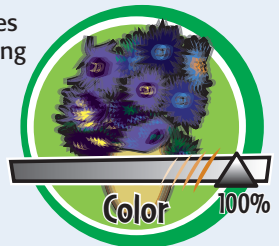
TIPS

What causes digital noise?

All digital cameras produce some electronic noise when they convert the light into electrical signals to record the color values. However, certain camera settings, such as underexposure or higher ISO settings, for example ISO 800 or higher depending on the camera, as well as the use of the Fill Light or Exposure sliders in Lightroom can all contribute to and increase the effect of digital noise.

**Can I just move the Color slider to 100% to remove the noise?**

No. Lightroom reduces digital noise by blurring or softening the image slightly. If you move the sliders to 100% you soften the image detail and give your photo an artificial look.








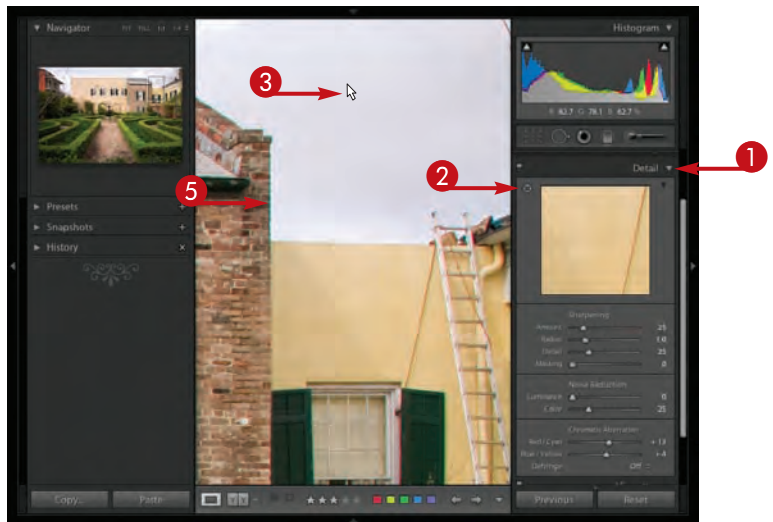
Decrease Chromatic Aberration

Chromatic aberrations are visually distorted pixels similar to digital noise and can appear as colored fringes on high-contrast edges, especially at the outside borders of the photo. Many newer lenses designed for digital cameras already reduce the effect, which comes from the different colored wavelengths of the light passing through the glass of the lens. Chromatic aberrations tend to be more visible with wide-angle lenses.





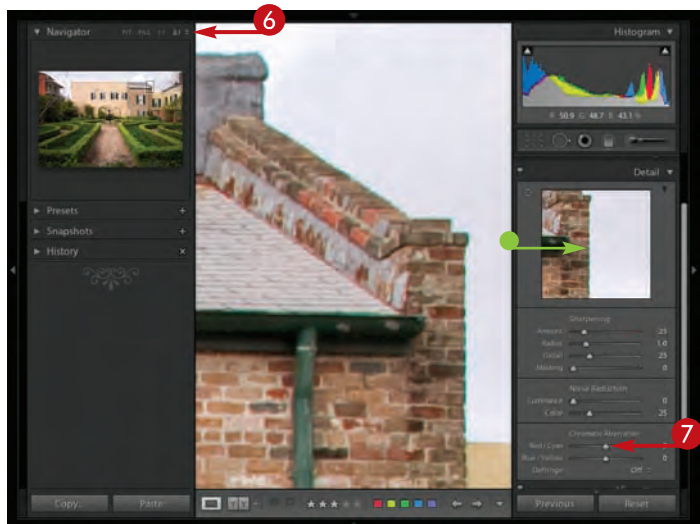
Decrease Chromatic Aberration


- 1 Click the **Detail** .
- 2 Click .
- 3 Position the cursor over the image.
- 4 Press  +  (**Ctrl** + ) to zoom in at least to 1:1.
- 5 Click a high-contrast edge.

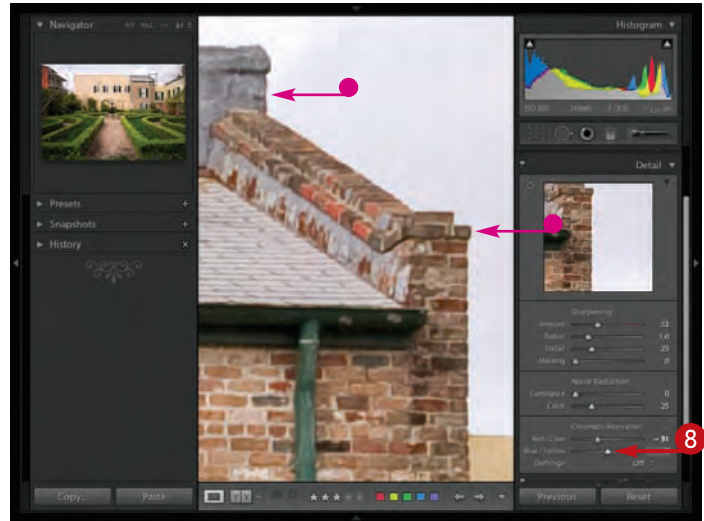


- The edge appears in the detail view.


- 6 Click the **Navigator**  and click **2:1** for a larger view.
- 7 Click and drag the **Red/Cyan** .

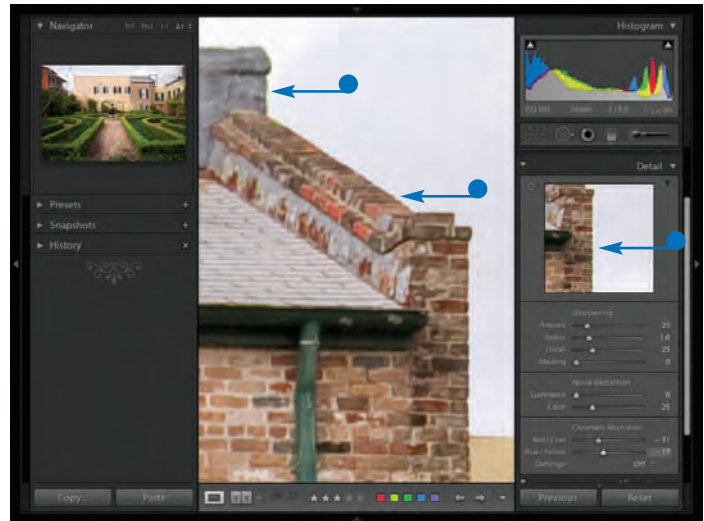


- The colored edges start to disappear.
- 8 Click and drag the **Blue/Yellow**  to refine the adjustment.



- The colored edges are removed or reduced.

Note: Optionally for images with specular highlights from light reflecting off a shiny surface, such as metal or water, and that display additional fringing around edges, click the **Defringe**  and select **Highlight Edges** or **All Edges**. Be sure to check the effect of the correction on the rest of the photo and not just the highlighted edges.



TIPS

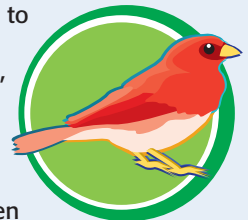
What causes chromatic aberration?

Chromatic aberration appears as colored fringing and is most often a result of the different colored wavelengths of the light being focused at different positions as they pass through the glass of the lens before reaching the sensor. Special types of glass in newer lenses optimized for digital cameras can reduce the distortion.



Where should I look for the colored fringes in my photo?

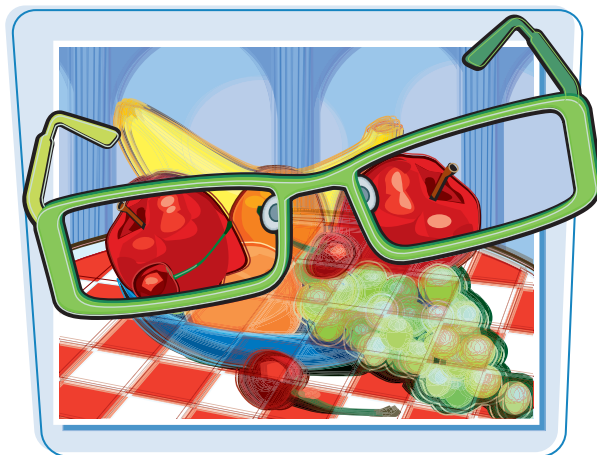
Chromatic aberration tends to appear more towards the outside edges of the image, particularly with wider-angle lenses, and appears most on sharp-contrast edges. It is most noticeable against a light sky or an even colored area.






Improve Details with Sharpening

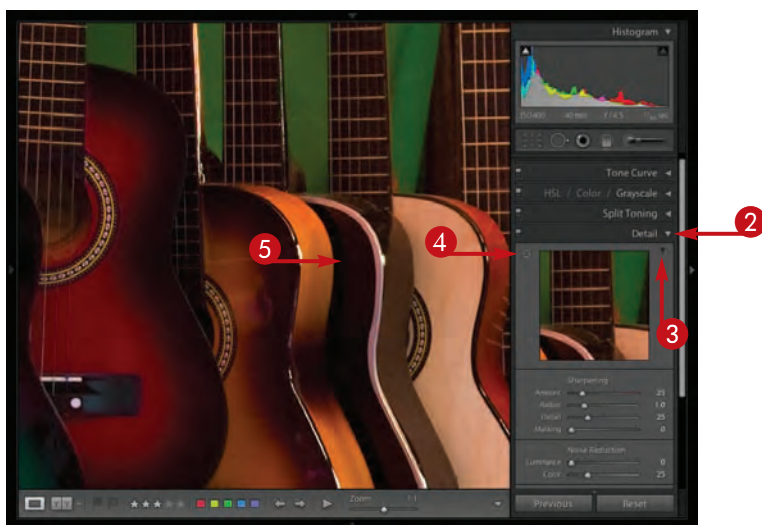
Once you have made the large area adjustments to your photo and reduced the noise if necessary, you can apply sharpening using the Detail pane in the Develop module. By default most cameras apply sharpening to JPEGs but not to RAW files. Lightroom automatically applies a little sharpening to all RAW images calculated as part of the camera default.

When you add sharpening, you may need to readjust the settings you used when reducing digital noise, because these tools are related.





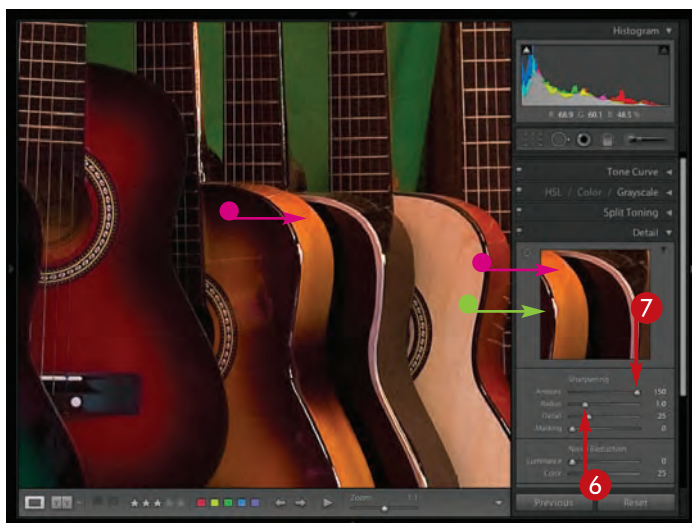
Improve Details with Sharpening


- 1 Press **⌘** + **=** (**Ctrl** + **=**) to zoom in to 1:1.
 - 2 Click the **Detail** .
 - 3 Click the **Sharpening** .
- The Detail preview opens.
- 4 Click .
 - 5 Position the cursor over the image and click.



- Detail preview shows a 1:1 view of the selected section.


- 6 Leave the **Radius**  at the default setting of 1, meaning sharpen one pixel to either side of an edge.
 - 7 Click and drag the **Amount**  all the way to the right.
- The sharpening is at maximum and distorted or white pixels called artifacts now appear in the photo.




- 8 Click and drag the **Amount**  slowly to the left until the artifacts are no longer visible.

The amount of sharpening and artifacts is reduced.

Note: The sharpening amount makes edges brighter or darker to give the appearance of sharpness.

- 9 Click and drag the **Detail**  slowly to the right, again to obtain the maximum sharpness with the fewest artifacts.

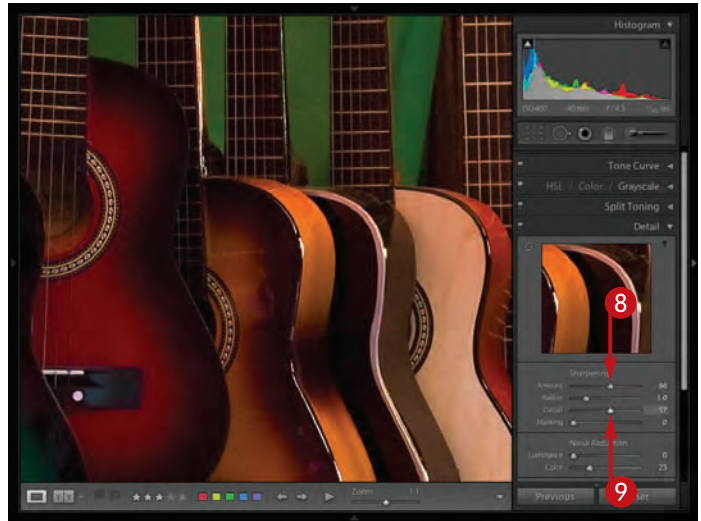
Note: Detail determines how many edges are sharpened.

- 10 Click and drag the **Masking**  slowly to the right to increase the sharpness until you still see sharp edges but also minimized noise in the solid color areas.

Note: Masking hides or masks sharpening from certain areas of the photos, restricting it to edges.

Note: Try to balance sharper edges with no added noise in the continuous-tone areas.

Note: Optionally, **Option** +click (**Alt** +click) the word **Sharpening** to reset all the sliders.



TIPS

How can I know what is being sharpened?

Press **Option** (**Alt**) as you click and drag the **Radius** or **Detail** sliders to show how far and which edges are sharpened (●). The preview shows black edges against a white background. Press **Option** (**Alt**) as you click and drag the **Masking** slider. Black areas in the preview are masked and not sharpened.



What is the difference between sharpening in the Library and Develop modules and sharpening in the Print module?

As you work on your images in Lightroom, you sharpen photos at two points in the process. You need to sharpen images as you work on them in the Library or Develop modules to compensate for the camera's conversion process from light on the sensor into pixels. When you prepare a photo for printing, you need to add specific sharpening for the type of printer used, because the printing process, both inkjet and offset press, introduces some softness.

Add a Lens Vignette for Effect

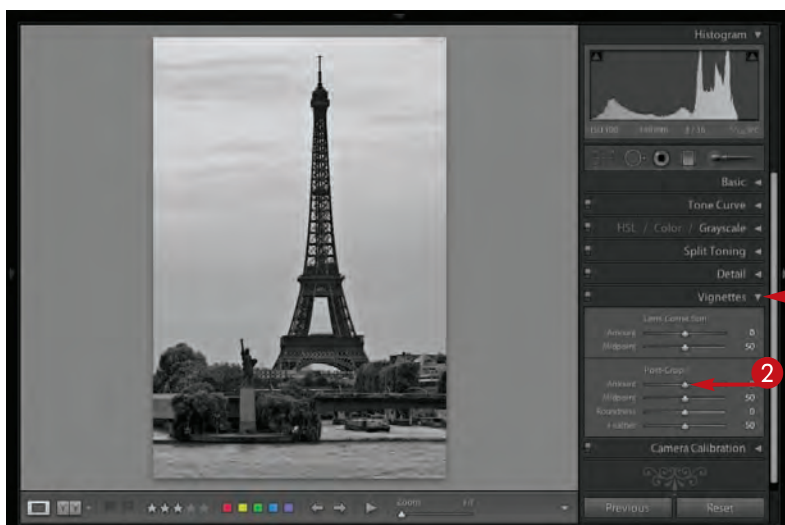
Vignettes can be a technical problem or an artistic addition. *Vignetting* is a darkening in the corners of a photo. The Vignettes pane in Lightroom's Develop module includes two sets of tools: One for removing or applying a vignette to the original image, the other for applying a vignette after cropping the photo.



Add a Lens Vignette for Effect

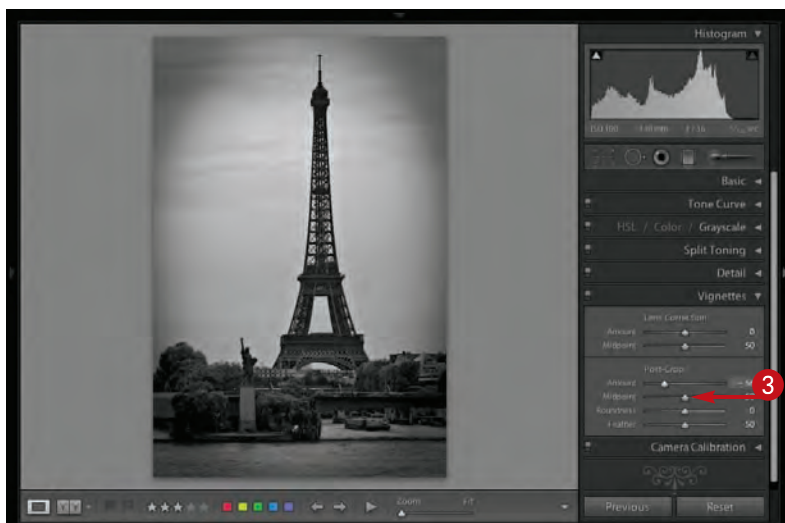
- 1 Click the **Vignettes** icon.
- 2 Click and drag the **Post-Crop Amount** slider to the left to darken the corners.

Note: To remove an undesirable lens vignette from an original uncropped photo, click and drag the **Amount** slider of the Lens Correction pane to the right.




The corners of the image darken.

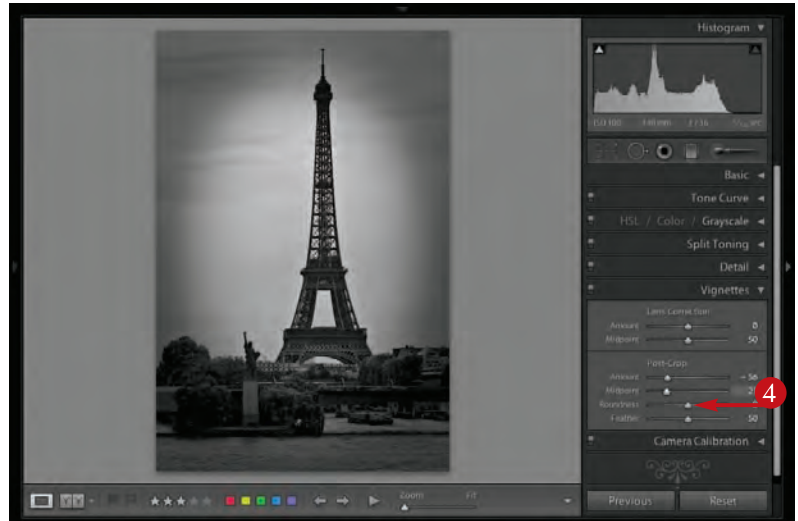
- 3 Click and drag the **Midpoint** slider to the left.





The darkened areas expand toward the center of the photo.

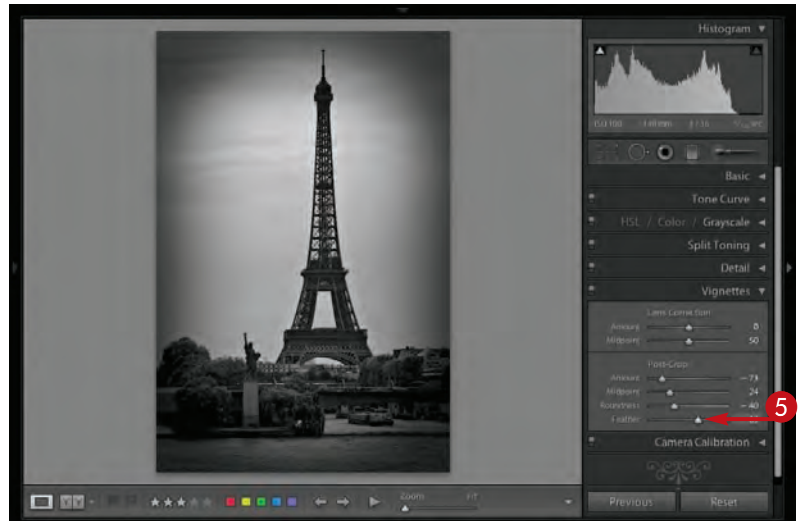
- 4 Click and drag the **Roundness**  to the left for a more oval effect.

Note: To create a more circular effect, click and drag the **Roundness**  to the right.



- 5 Click and drag the **Feather**  to the right to soften the transition between the vignette and the center of the photo.

Note: To create a hard-edged darkened area around the center of the image, click and drag the **Feather**  to the left.



TIPS

What causes camera-induced vignetting?

Lens vignetting occurs when more light reaches the center than the edges of the digital sensor. It can happen when the lens is not optimized for the digital camera or with some wide-angle lenses and/or wide open apertures.



Why are vignettes applied to a good photo?

Adding a darkened vignette can give an image a dark, moody look. It can also help focus the viewer's eye on the central subject of the image. You can also apply a light-colored vignette to imitate old-style portraits.



Save Your Settings as a Custom Preset


Once you have created a special effect, you can apply it to other images by copying and pasting, as shown in Chapter 7, or synchronize the adjustments to multiple photos, as shown in Chapter 6. You can also save your settings as a custom preset. Your new preset will appear in the Presets pane in the Develop module and the Quick Develop pane in the Library module under Saved Presets.



Save Your Settings as a Custom Preset



CREATE A NEW CUSTOM PRESET

Note: When you create a preset, the included settings are based on the current settings of the selected photo.

- 1 Make adjustments to a photo using any combination of the Develop module tools.
- 2 Click the **Presets** .

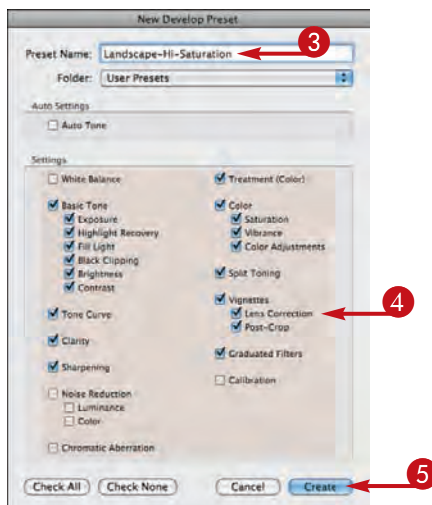


The New Develop Preset dialog box appears.

- 3 Type a name in the Preset Name text box.
- 4 Click any individual checked setting to deselect it ( changes to ).

Note: Optionally, click **Check None** and then click only the settings you want to use.

- 5 Click **Create**.



- Your custom preset appears in the User Presets under the Presets pane.

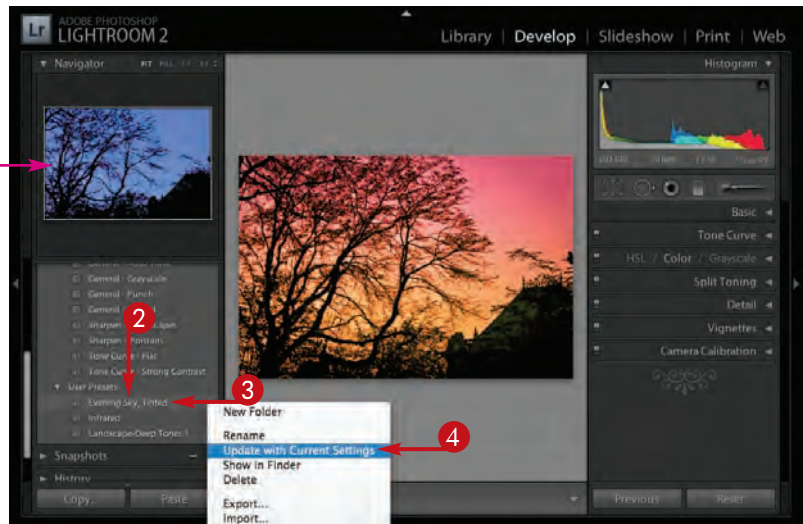
Note: To delete a custom preset, **Control**+click (right-click) the preset in the Presets pane and click **Delete** from the menu that appears. You cannot delete the default Lightroom presets.



UPDATE A CUSTOM PRESET

- 1 Make adjustments to a photo using any Lightroom tools.
- 2 Position the cursor over the preset to update.
- 3 **Control**+click (right-click) the preset in the Presets pane. A menu appears.
- 4 Click **Update with Current Settings**.

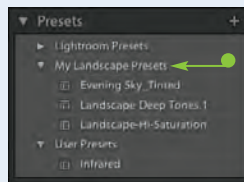
The custom preset's settings are updated to those of the selected photo.



TIPS

Is there a way to manage a long list of custom presets?

Yes. You can create your own folders inside the User Presets folder to group your presets. **Control**+click (right-click) the User Presets in the Presets pane. Click **New Folder** from the menu. Type a name for the folder in the New Folder dialog box that appears and click **Create**. Your folder (●) appears in the list under User Presets. Click and drag any custom presets into this folder in the Presets pane.



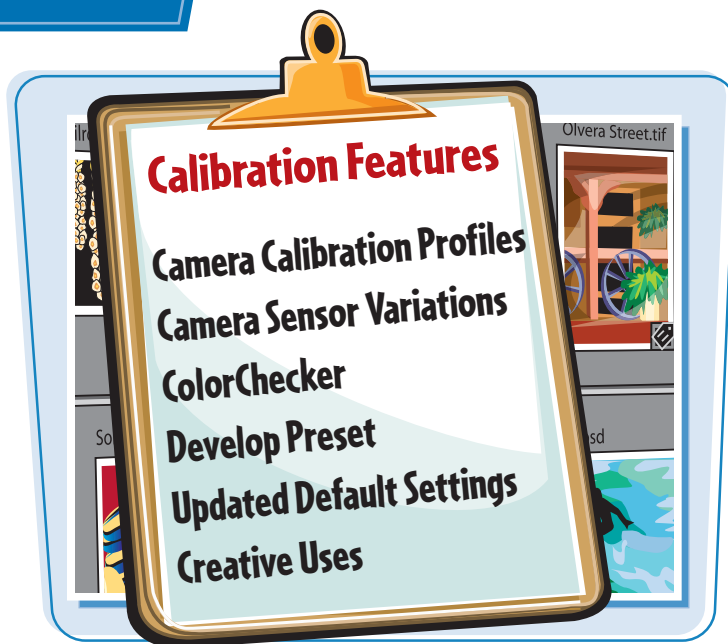
Can I export a custom preset to use on another computer?

Yes. You can **Control**+click (right-click) a preset and select **Export** to use it on another computer or **Import** to bring different presets into Lightroom. You can also purchase predesigned presets such as those from KubotaiImageTools.com and import them.



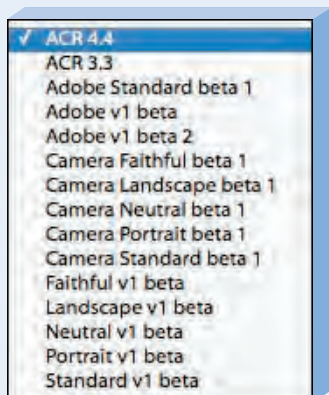
Understanding the Camera Calibration Feature

When you import RAW photos, Lightroom applies the Adobe Camera Raw (ACR) conversion for the camera model you used. You can select different settings created by Adobe and even fine-tune any of the settings using the sliders in the Camera Calibration pane. You can save your customized settings as a new camera specific preset for your particular camera.



Camera Calibration Pane Built-In Profiles

Thomas Knoll and Adobe measured the color response of many models of cameras under specific lighting conditions to create custom profiles. As long as your camera model is included in the ACR profiles, your photos automatically appear in Lightroom with that profile applied. Lightroom includes different versions of ACR and other profiles corresponding to custom settings of your specific camera model.



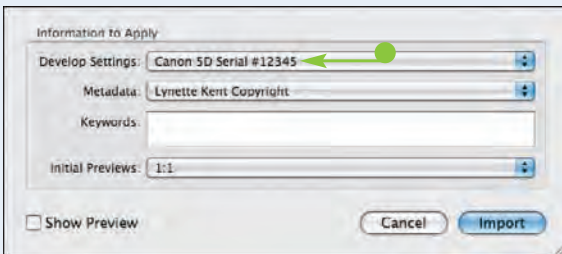
Camera Sensor Variations

Because digital sensors can vary from camera to camera of the same model, you can use the Camera Calibration sliders for the Tint in the Shadows, and the Hue and Saturation of the Red, Green and Blue Primary colors, to define and adjust the way Lightroom translates the color from your particular camera.



Third-Party Software

You can shoot a 24-patch GretagMacbeth ColorChecker Chart (<http://www.xrite.com>) and use the sliders to create your own profile or, for more accuracy and advanced photographers, use your shot of the ColorChecker with Photoshop and a third-party ACR Calibrator software script (<http://fors.net/chromoholics>).



Create a Develop Preset

You can create a new preset (●) from the settings, selecting just the calibration settings in the New Develop Preset dialog box, and then apply your camera-specific calibration preset to all photos from that camera upon import.

Update the Default Settings

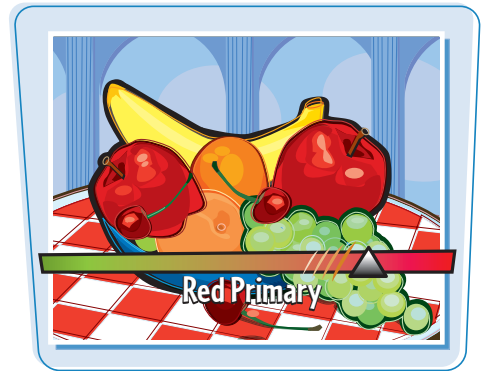
You can also update Lightroom's default camera calibration settings with your own adjustments by clicking **Develop** in the top menu and clicking **Set Default Settings**. Click **Update to Current Settings** (●) in the warning box.



Using the Camera Calibration Pane

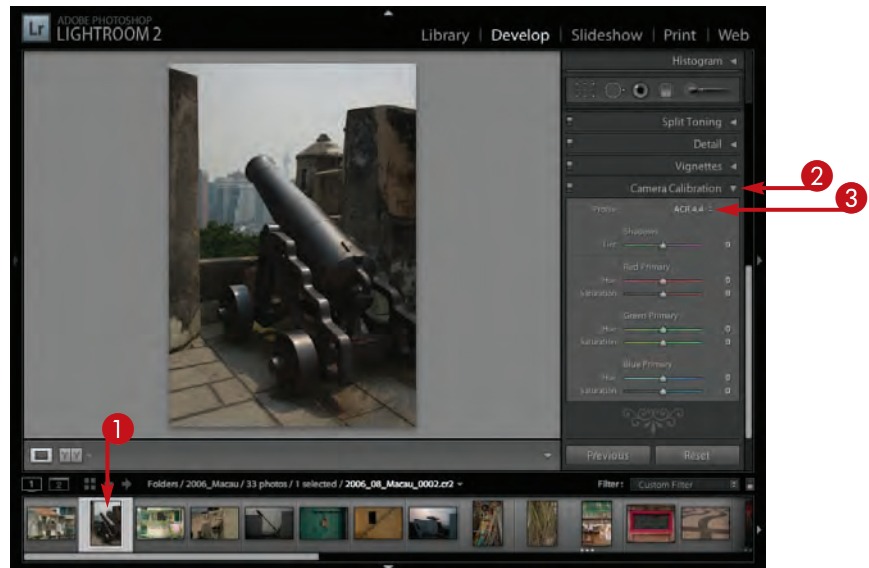
You can change the look of a photo shot in the RAW file format by selecting a different profile in the Camera Calibration pane. Changing the profile changes the tones and appearance of the photo because the profile describes how Lightroom should display the image. You can also use the sliders in the Camera Calibration pane to alter your image with creative color adjustments.

The adjustments shown in this task are subjective and depend on your photo and the look you want to achieve.



Using the Camera Calibration Pane

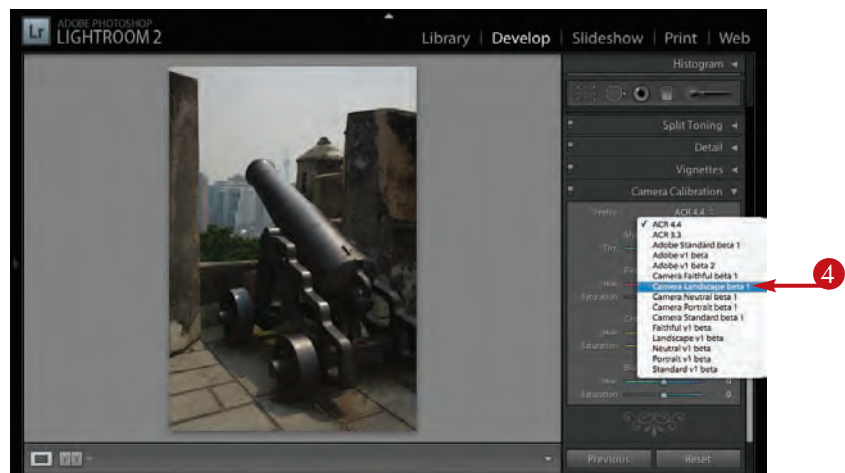
- 1 Click a photo in the filmstrip to select it.
- 2 Click the **Camera Calibration**  to expand the pane.
- 3 Click the **Profile** .



The list of Adobe Camera Raw profiles appears.




- 4 Click a different profile in the menu to apply it.

Note: The menu may list different profiles depending on the camera you used for the photograph.



The colors and tone in the image change.

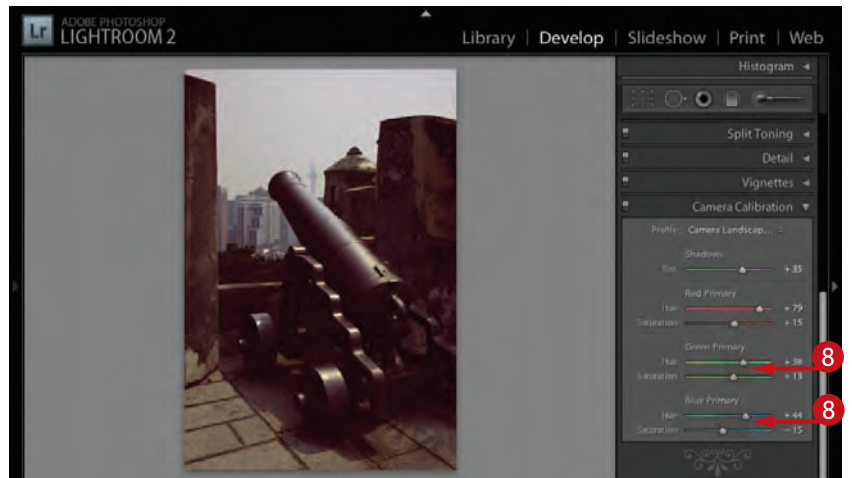
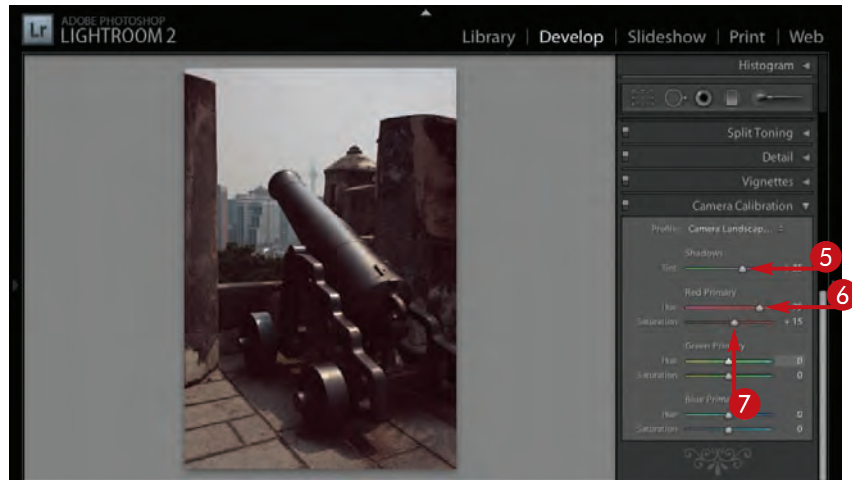
Note: Depending on the photo and the profile, the changes may not be very strong.

- 5 Click and drag the **Shadows Tint**  to the right for a more magenta tint or to the left for a greener tint.
- 6 Click and drag the **Red Primary Hue**  to the right to lighten the red values.
- 7 Click and drag the **Red Primary Saturation**  to the right to increase the saturation of the red values.

The colors and tone in the image change more.

- 8 Repeat Steps 6 and 7 for the **Green** and **Blue Primary Hue** and **Saturation** sliders to adjust the photo to create a specific look.

Note: Optionally, scroll up to the **Basic** pane and lower the **Saturation** .



TIPS

What kind of Camera Raw profiles does Adobe include with Lightroom?

The profiles that ship with Lightroom include general Adobe Camera Raw profiles as well as specific sets specifically created for many of the digital cameras on the market. Adobe constantly adds to and updates the list. New camera profiles are added to your version of Lightroom when you download updates. Be sure to set the general Lightroom preferences to **Automatically check for updates**.

Do I need to create my own Camera Calibration profile if my camera model is included in the ACR profiles that ship with Lightroom?

No. Although each individual camera's sensor varies from every other sensor in the same camera make and model, Adobe created the profiles with multiple measurements. The variations for images from your specific camera may not be very noticeable.

CHAPTER

9

Making Slideshows Look Professional with Lightroom



Slideshows are a great way to share your photos. You can create a quick slideshow just to review your own photo collections or create customized slideshows to show clients. The Slideshow module in Lightroom includes standard slideshow templates and many options for customizing and creating a professional-looking slideshow.

Locate the Parts of the Slideshow Module	236
Play an Impromptu Slideshow	238
Create a Basic Slideshow with a Slideshow Template	240
Customize an Existing Lightroom Slideshow Template	242
Add Customized Text Overlays to a Slideshow	246
Save a Custom Slideshow Template	248
Export a Slideshow to PDF	249

Locate the Parts of the Slideshow Module

As with the other Lightroom modules, getting to know the parts of the Slideshow module is the key to creating slideshows quickly and effectively. Like the other modules, the Slideshow module includes predesigned templates you can use or modify, and the option to save your own custom templates to use over and over again. The Filmstrip and Filmstrip tools on the bottom of the screen are the same in all the modules.



● Slideshow Slide Editor viewing area

The Slide Editor displays the highlighted photo in the Collection using the currently selected slideshow template or design.

● Slideshow Module toolbar

The toolbar includes the controls for navigating, playing, and adding text to your slides. From the left:

Click to go to first slide.

Click to go to previous slide.

Click to go to next slide.

● Click to select photos for slideshow.

Click to launch a preview of the slideshow.

Click directly on the text overlay on the slide and click here to rotate it counter-clockwise.

Click directly on the text overlay on the slide and click here to rotate it clockwise.

Click to add text to a slide.

● The Custom Text field appears here when Add Custom Text is clicked.

● Slideshow Module left panel

Slideshow Preview

The Preview displays the first selected photo in the Filmstrip.

Slideshow Template Browser

The Template Browser lists all the preset slideshow templates and any custom templates you create and save. Position the cursor over a template to view the preset slideshow layout in the Preview window.

Slideshow Collections pane

The Collections pane shows your photo collections from which you can more easily build the slideshow.

● Export buttons

You can export your slideshow as JPEG files or as a PDF.

● Slideshow Module right Panel

The right panel contains all the options for customizing your slideshow.

Options pane

You can select a style and modify the slide appearance, including that of fill frame slides, and add borders and cast shadows.

Layout pane

You can choose to show the guides in the design.

Overlays pane

You can select and modify the information to display on the slides and to add drop shadows to text added in the toolbar.

Backdrop pane

You can select and modify the background slide color, add an image as a background, and give the slide a gradient color wash.

Titles pane

You can add an intro and ending screen and also add your identity plate to these screens.

Playback pane

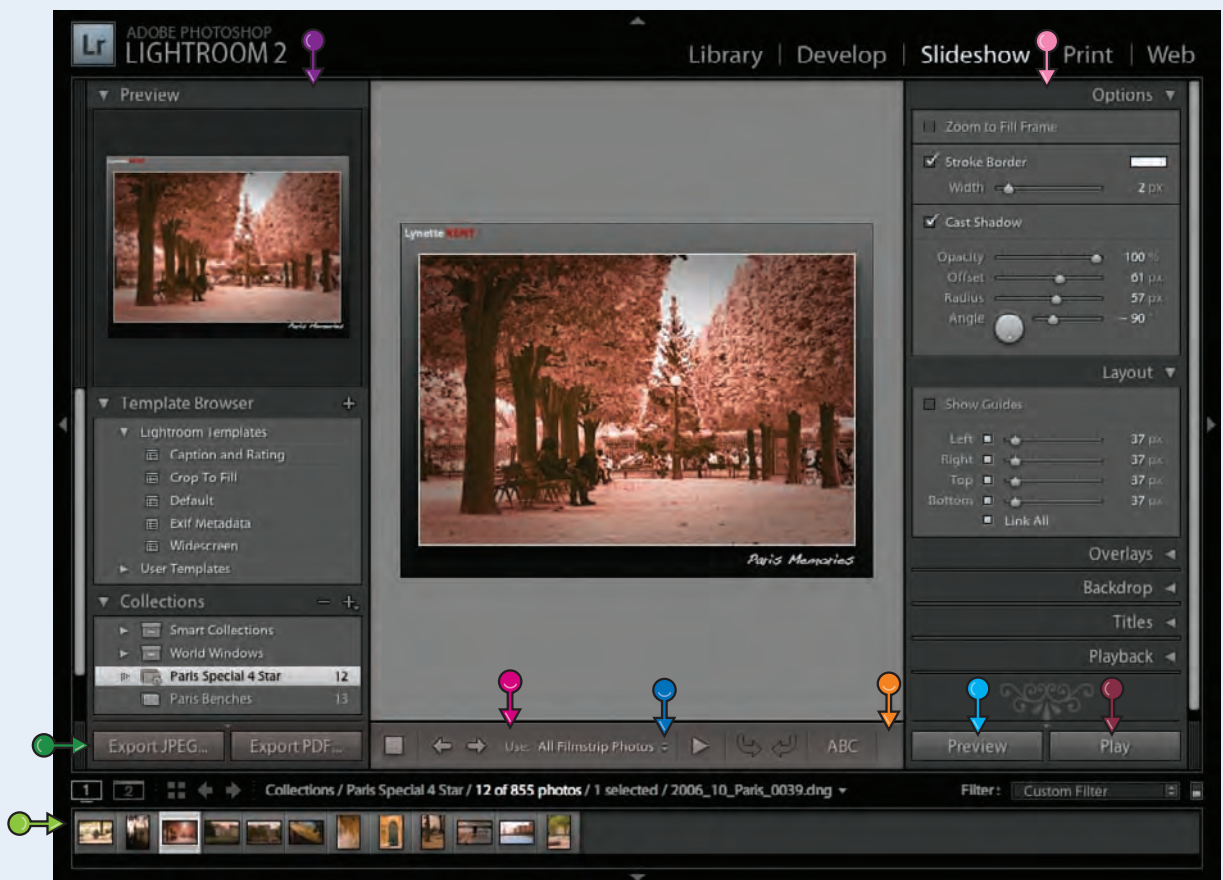
You can add music for playing the slideshow in Lightroom, change the duration of the slides and the fades, select a fade color, and have the slideshow repeat or even display in a random order.

Preview button

Click to view a preview in the main viewing area of how the slide will appear with the selected settings.

Play button

Click to start the slideshow with the selected settings in full screen mode.



Play an Impromptu Slideshow

You can actually play a quick impromptu slideshow of any selected images in any of the modules. Seeing your images in full screen with a black background is a convenient way to review a newly imported group of photos, or to quickly see a collection of the images with which you have been working.



Play an Impromptu Slideshow

- 1 In any module, **⌘+click** (**Ctrl+click**) multiple photos in the Filmstrip.
- 2 Press **⌘+Return** (**Ctrl+Enter**).



The impromptu slideshow begins showing the selected photos.

- 3 With the slideshow playing, press **←** to go back to the previous slide.



The previous slide appears and the slideshow continues.

Note: Optionally, press  to advance to the next slide to advance the slideshow more quickly.

- 4 Press **Spacebar** to pause the slideshow.
- 5 Press **Spacebar** to resume the slideshow.
- 6 Press **Esc**.

The slideshow quits and Lightroom returns to the previous module.




TIPS

Can I change the background settings for the impromptu slideshow?

Yes. The impromptu slideshow automatically applies the settings currently selected in the Slideshow module. Make sure you have your favorite slideshow options selected in the Slideshow module ahead of time.



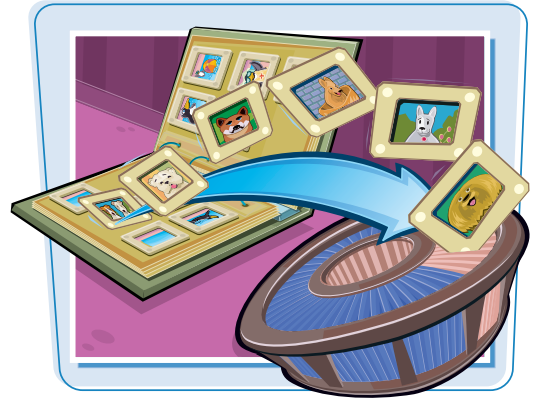
Is there another way to start an impromptu slideshow?

Yes. In any module you can click Window from the top menu and click **Impromptu Slideshow**. You can also start a slideshow in the Library or Develop modules by clicking **Play**  in the toolbar.



Create a Basic Slideshow with a Slideshow Template

Lightroom's Slideshow templates include a number of predefined slide styles you can use to quickly build your own slideshow using any of the photos in your catalog. By grouping your images in a collection in the Library module first, you can easily add or remove images from the slideshow and rearrange their display order so the slideshow plays the way you intend.

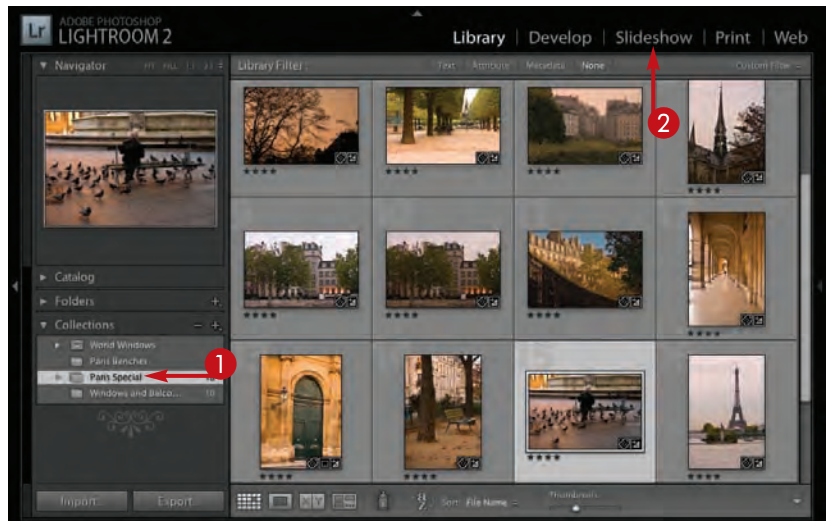


Create a Basic Slideshow with a Slideshow Template

- 1 In the Library module, click a collection of photos.

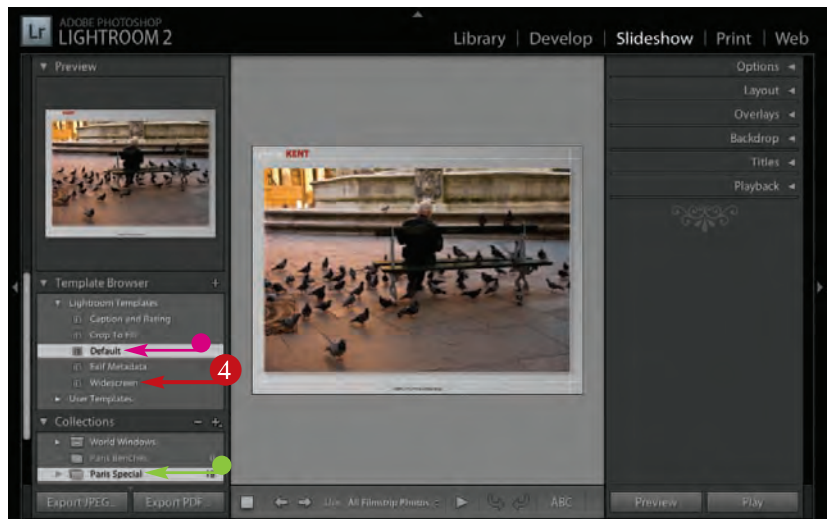
Note: See Chapter 3 to create a collection.

- 2 Click **Slideshow** in the module picker.





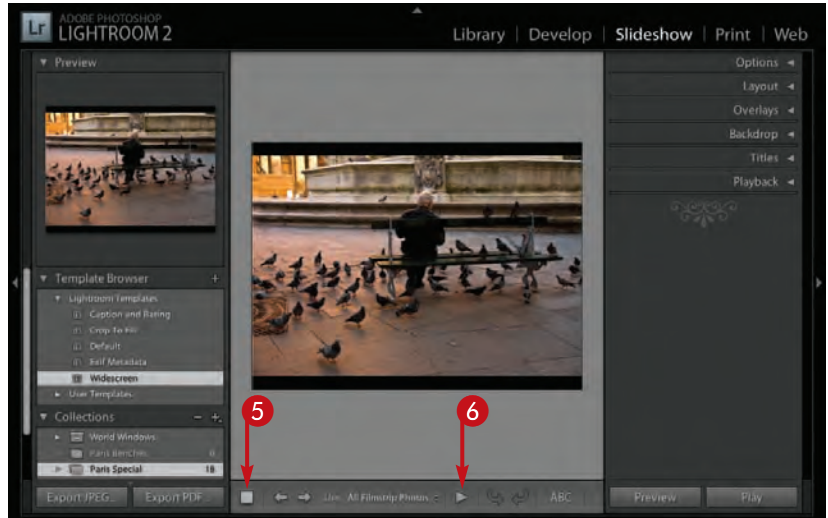
- The slideshow module opens with the collection selected.
 - The Slide Editor displays the first slide with the default template or the last selected template applied.
- 3 Position the cursor over each of the Lightroom templates to view the slide in the Preview pane.

- 4 Click another template.






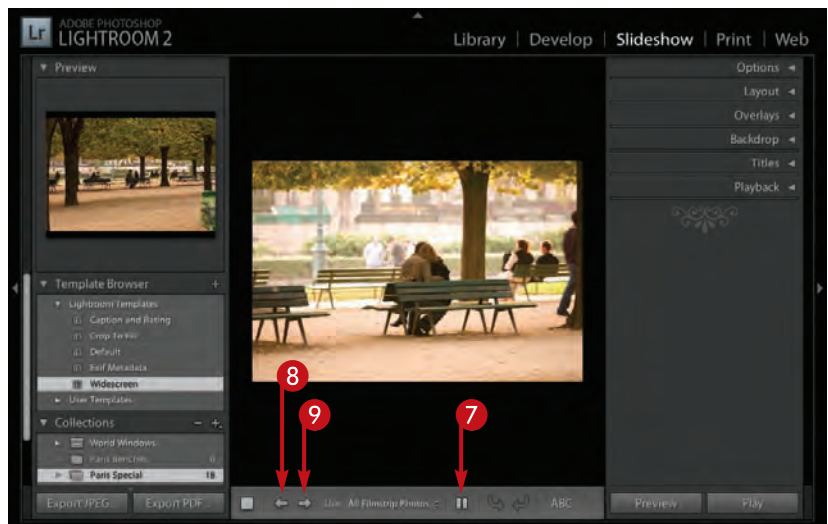
The Slide Editor view displays the slide in the different template.

- 5 Click  to go to the first slide.
- 6 Click  to preview the slideshow.



The slideshow begins in the Slide Editor pane.

- 7 Click  to pause the slideshow.
- 8 Click  to go to the previous slide.
- 9 Click  to go to the next slide.
- 10 Press **Esc** to stop the slideshow.



TIPS

Can I use a Smart Collection to create a slideshow?

Yes. However, you cannot change the order of the photos in the Filmstrip for a Smart Collection. You can convert the Smart Collection to a named collection in the Library module, and then in the Slideshow module you can easily change the order of the slides as you preview the slideshow.



Can I preview the slideshow in full screen?

Yes. Click **Play** at the bottom of the right panel. You can pause the slideshow by pressing **Spacebar**, and stop the slideshow by pressing **Esc**.





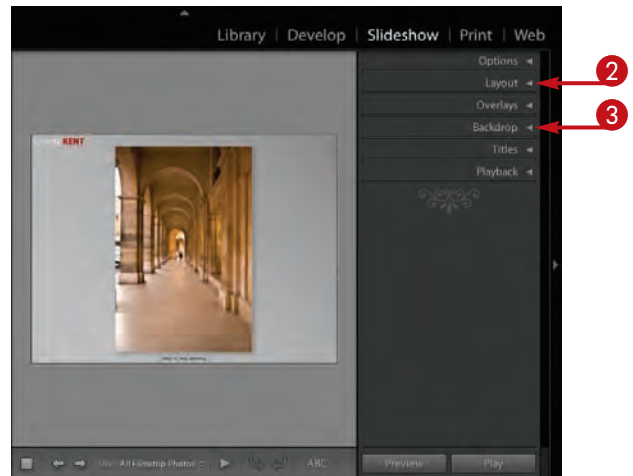
Customize an Existing Lightroom Slideshow Template

The right panel of the Slideshow module includes all the tools you need to completely customize the look of your slideshow. You can change the color of the background, add a border and drop shadow, add a soundtrack, and more by clicking any of the options in the right panel. You can then save your customized template as a new template to use for another collection.






Customize an Existing Lightroom Slideshow Template

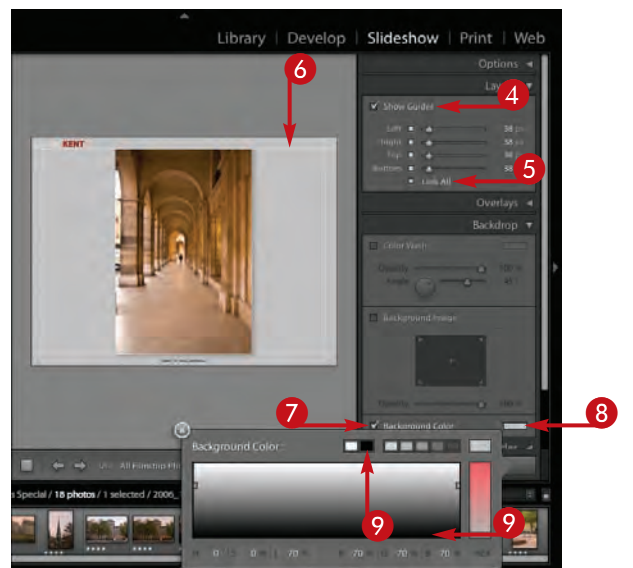
- 1 Repeat Steps 1 and 2 from the previous task.
- 2 Click the **Layout** .
- 3 Click the **Backdrop** .



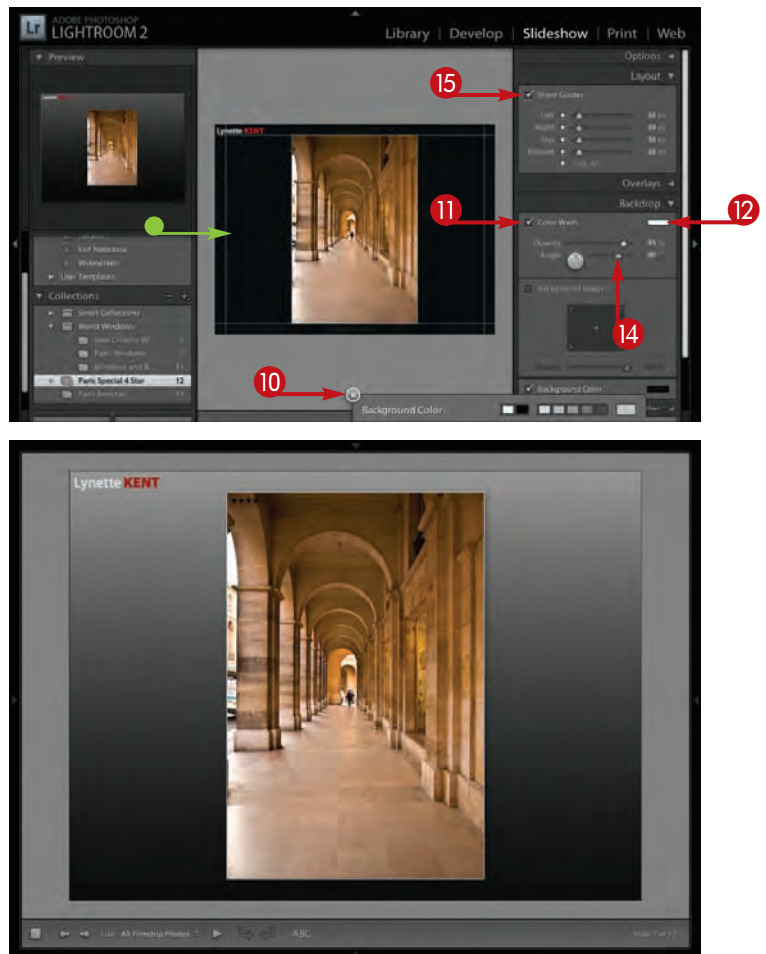
- 4 Click **Show Guides** ( changes to ).
- 5 Click **Link All** to link all the guides

Note: *Link All* is selected when the boxes appear white.

- 6 Click and drag the guides in the Slide Editor to readjust the image size.
- 7 Click **Background Color** if it is not already checked ( changes to ).
- 8 Click the **Background Color** box ().
- 9 Click in the color range or on a sample color.



- The color of the slide background changes.
 - 10 Click the Background Color selector **Close** button (X).
 - 11 Click **Color Wash** (☐ changes to ☑).
 - 12 Click the **Color Wash** box (—).
 - 13 Repeat Steps 9 and 10 when the Color Wash selector appears to select a wash color.
 - 14 Click and drag the **Angle** (◀▶) to change the angle of the wash.
 - 15 Click **Show Guides** to deselect it. (☑ changes to ☐).
 - 16 Press **Shift+Tab** to view the layout full screen.
- The new slide layout fills the screen.
- 17 Press **Shift+Tab** to return to the full Slideshow interface.



TIP

When and how do I use the Cast Shadow option?

You can add a Cast Shadow (●) to the photo to make the image stand out more against the slide background. You must use a light colored background so the shadow effect is visible. Use the four Cast Shadow sliders to customize the shadow. Increasing the opacity of the shadow makes the image stand out more. The Offset (◀▶) changes the distance the shadow is offset from the image. Increasing the Radius setting increases the blur of the shadow, and the Angle setting changes the direction the shadow is cast.









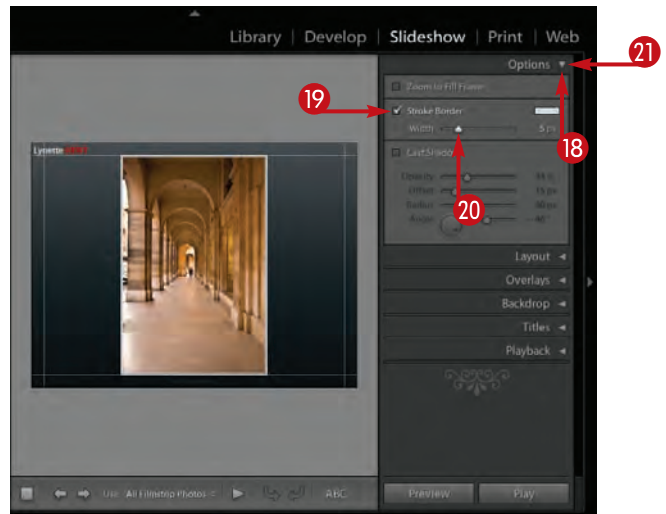
Customize an Existing Lightroom Slideshow Template (continued)







You can customize not only the background color and stroke border, you can also include or even change your identity plate and where it appears on the slides. You can even add an introductory title frame and an ending frame to the slideshow.



Customize an Existing Lightroom Slideshow Template (continued)

- 18 Click the **Options**  to expand the pane.
- 19 Click **Stroke Border**  changes to .
- Note: Optionally, click the  to select a different stroke color.*
- 20 Click and drag the **Width**  to increase the border.
- 21 Click the **Options**  to collapse the pane.

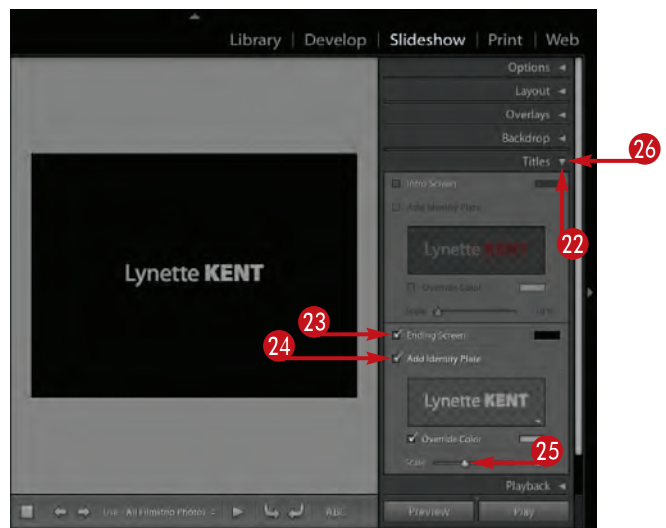


- 22 Click the **Titles**  to expand the pane.
- 23 Click **Ending Screen**  changes to .
- The Slide Editor preview fills with black temporarily.
- 24 Click **Add Identity Plate**  changes to .
- 25 Click and drag the **Scale**  to adjust the size of the identity plate in the closing screen.

*Note: Optionally, click **Override Color**  changes to  to change the identity plate for the ending screen.*

The Slide Editor preview displays the closing screen temporarily.


- 26 Click the **Titles**  to collapse the pane.






- 27 Click the **Playback** .

Note: Optionally, click **Soundtrack**  changes to  and click the  to select a music source and music.

- 28 Click **Slide Duration**  changes to .

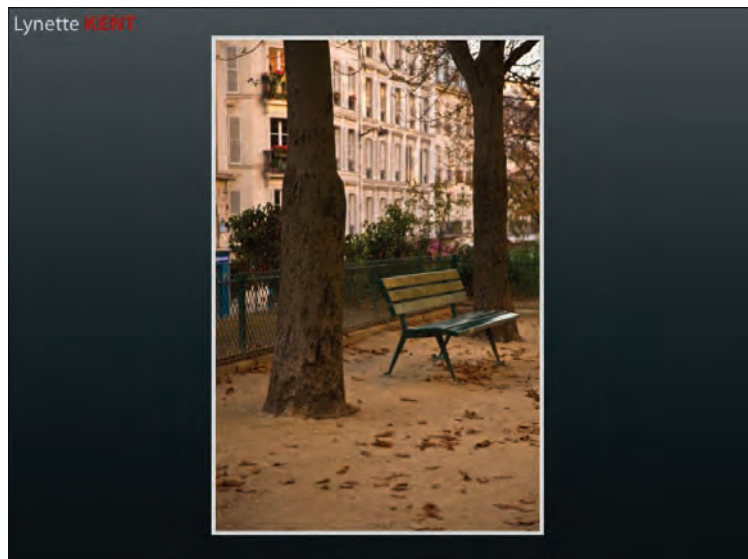
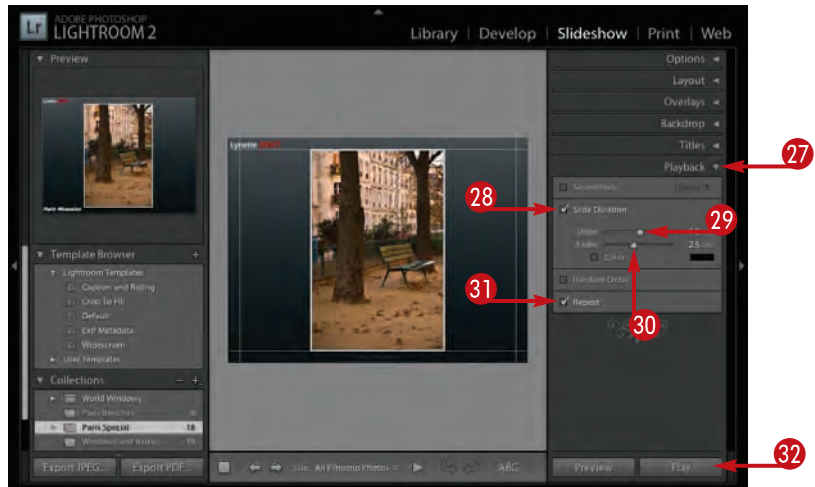
- 29 Click and drag the **Slides**  to set the duration of each slide on screen.

- 30 Click and drag the **Fades**  to set the amount of time each slide fades in and out.

- 31 Click **Repeat** to have the slideshow repeat continuously  changes to .


- 32 Click **Play**.

The slideshow plays in full screen mode.





TIPS

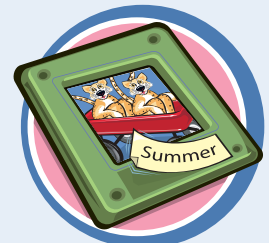
How do I add a soundtrack to my slideshow?

You can add any music file in your iTunes playlist or in a folder or your hard drive (PC). In the Playback pane, click **Soundtrack**. Click the **Library** (Mac) or **Music**  to select the music file.



Can I remove the identity plate from each of the slides?

Yes. In the Overlays pane, click **Identity plate**  changes to . The identity plate is immediately removed from the slides.



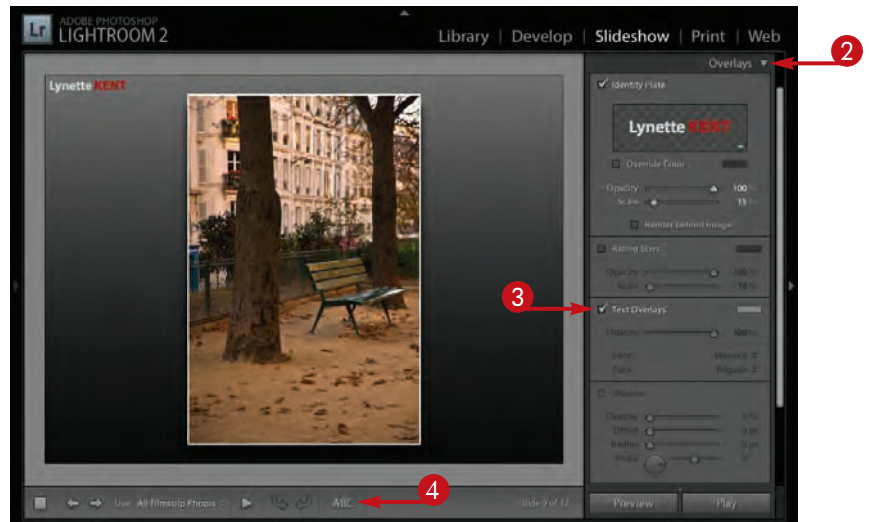
Add Customized Text Overlays to a Slideshow

You can place a slideshow title on each slide by adding text overlays. Lightroom puts the text overlays on the bottom left corner by default; however, you can move the text to any area you prefer. You can select all the attributes of the text including the font and type face, and opacity. You can even add shadows to the text overlay to make it stand out from the image.



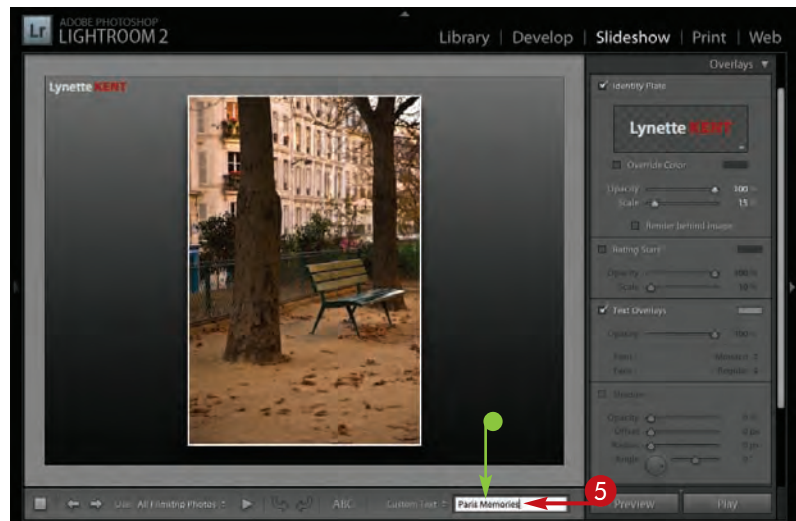
Add Customized Text Overlays to a Slideshow

- 1 Press **F7** to hide the left panel and make the toolbar wider.
- 2 Click the **Overlays** to expand the pane.
- 3 Click **Text Overlays** changes to .
- 4 Click **Add text to slide** in the toolbar.



● The Custom Text box appears.

- 5 Click in the custom text box and type your overlay text.
- 6 Press **Return** (**Enter**).



- The text appears in the bottom left corner of the slide.
- 7 Click the **Font** [icon] and select a font from the list that appears.
- 8 Click the **Face** [icon] and select a type-face from the list that appears.

The Text changes style on the slide.

- 9 Click and drag on a handle of the text bounding box to adjust the size.

- 10 Click and drag the box to reposition the text.

- The Text moves on the slide.

- 11 Click and drag the **Opacity** [icon] in the Text Overlays pane to the left to fade the text.

- You can click the **Text Overlays** color box [icon] to select a different color for the text overlay.

Your custom text overlay now appears on every slide.



TIPS

Is the Shadow option in the Overlays pane different from the Cast Shadow in the Options pane?

Both Shadow and the Cast Shadow have the same options for adjustment and include sliders for Opacity, Offset, Radius, and Angle. The Shadow option in the Overlays pane only adds a shadow to the letters in the text overlay and you cannot select the Shadow option unless the Text Overlays is selected. The Cast Shadow is applied to the frame of the photo on the slide.

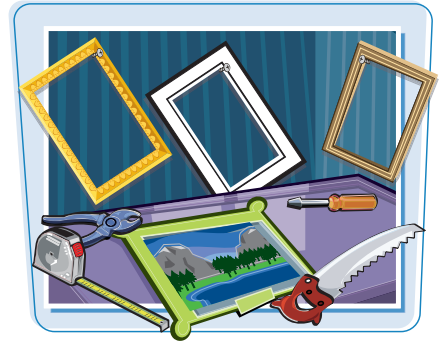


Are there multiple ways of changing the angle of the shadow?

Yes. You can click and drag the **Angle** [icon], click and drag directly on the number of degrees, or click on the number and type the specific degree angle you want. You can also click and drag in the circle to change the direction of the shadow.

Save a Custom Slideshow Template

Once you have customized a slideshow, you can save the settings as your own custom template. You can make and name as many templates as you want and save them to use for different types of presentations.



Save a Custom Slideshow Template

1 With your custom slideshow still open, click **Slideshow**.

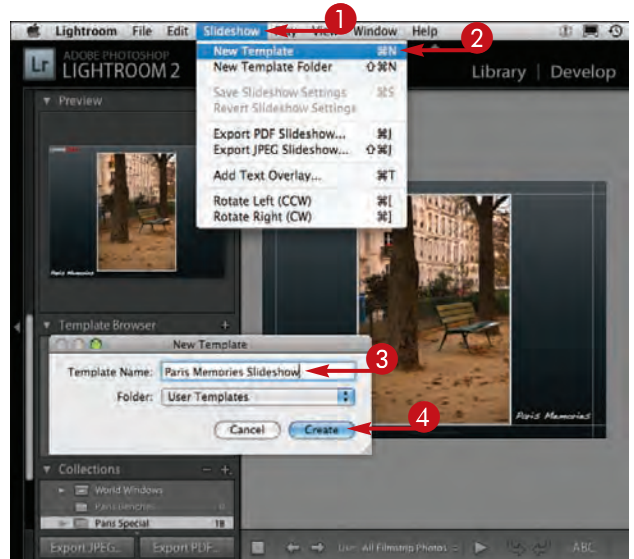
2 Click **New Template**.

Note: Optionally, click the plus sign (+) in the Template Browser pane in the left panel.

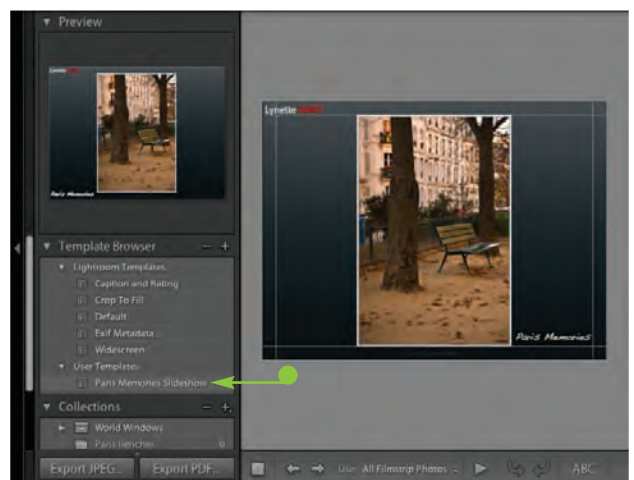
The New Template dialog box appears.

3 Type a name in the field.

4 Click **Create**.



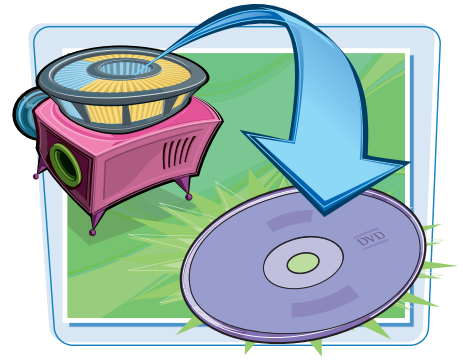
- The new template is placed in the User Templates and appears in the Template Browser.



Export a Slideshow to PDF

chapter 9

You can play your slideshow in the Slideshow module, or you can export the slideshow as a PDF. You adjust the Quality settings according to how the Slideshow will be used. Select the highest quality setting, a large screen size, and full screen playback to burn the slideshow to DVD media as a portfolio presentation, for example. Select a lower quality setting, such as 60 percent, and/or a smaller size, if you plan to attach the slideshow to e-mail.

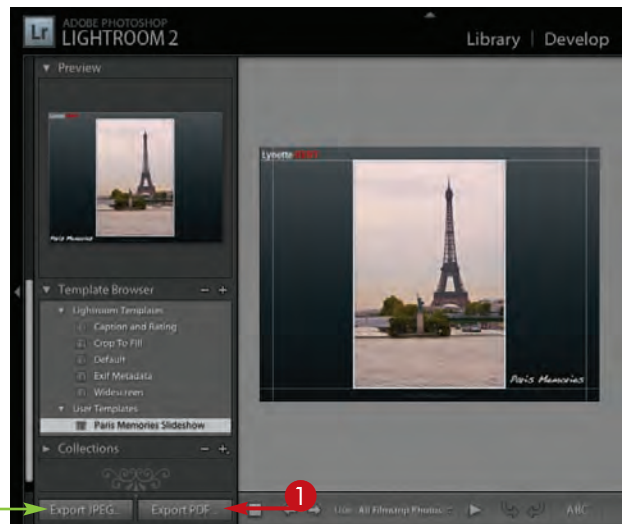


Export a Slideshow to PDF

1 With your slideshow open, click **Export PDF**.

- You can also export the slides as individual JPEGs by clicking **Export JPEG**.

Note: Although the soundtrack does not export with the slideshow, you can add a soundtrack later using Acrobat Professional.



2 Type a name for the slideshow in the text box.

3 Click **Automatically show full screen** (☐ changes to ☒.

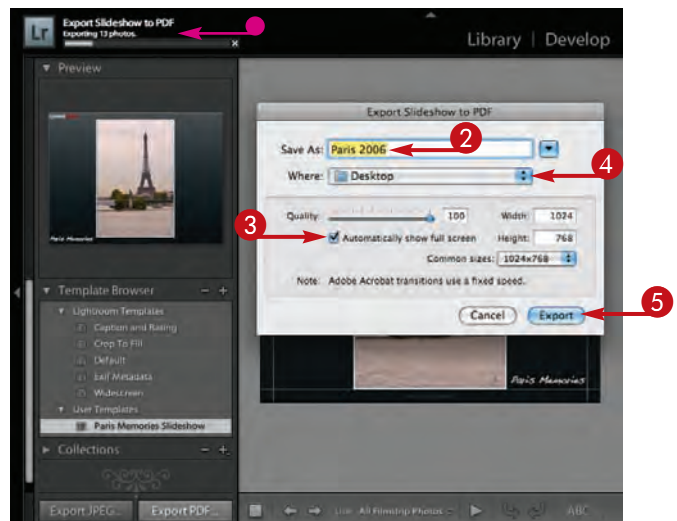
Note: Optionally, click the **Common sizes** button to select a different screen size.

4 Click the **Where** button and select a location to save the PDF Slideshow from the menu that appears.

Note: Optionally, click the **Where** button to open a Finder window and navigate to a location to save the PDF Slideshow.

5 Click **Export**.

- Lightroom exports the slideshow as a PDF and displays a progress bar in the upper left corner.



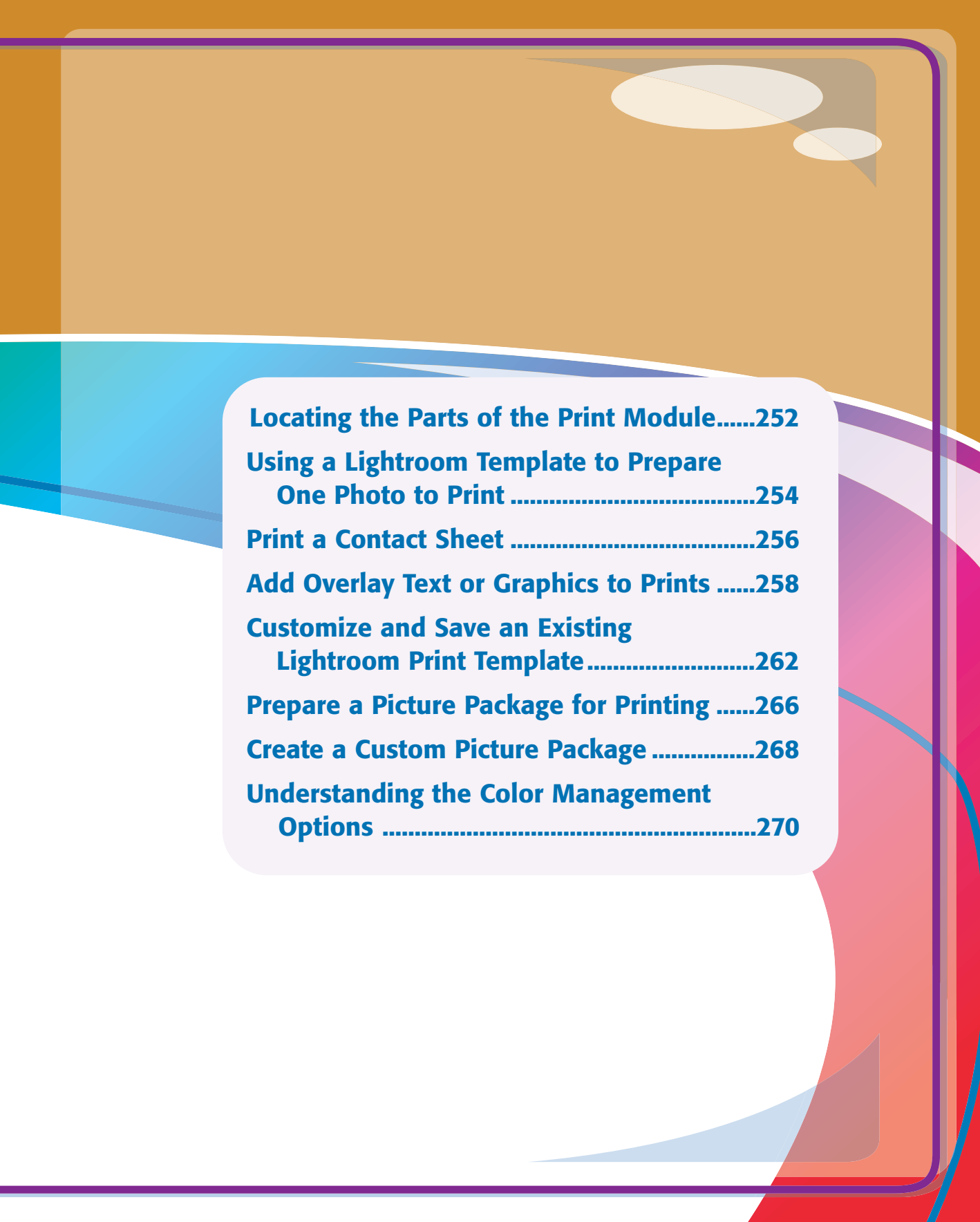
CHAPTER

10

Printing from Photoshop Lightroom



Lightroom's Print module is like a page layout program for photographers. The individual settings for layout, color control, and specific printer media are all easily accessible and visually uncomplicated. And like the other output modules, the Print module includes layout templates and customization options to help you print what you want and decide how you want it to look.



Locating the Parts of the Print Module.....	252
Using a Lightroom Template to Prepare One Photo to Print	254
Print a Contact Sheet	256
Add Overlay Text or Graphics to Prints	258
Customize and Save an Existing Lightroom Print Template	262
Prepare a Picture Package for Printing	266
Create a Custom Picture Package	268
Understanding the Color Management Options	270

Locating the Parts of the Print Module

The Lightroom interface includes all the tools you need to design, lay out, and prepare your images for print. As with the other output modules, the left panel includes the templates and photo collections, and the right panel contains all the tools for customization. The center section shows you a layout of the actual pages you are designing. The Filmstrip and Filmstrip tools on the bottom of the screen are the same in all the modules.



● Print Module main viewing panel

The main viewing panel shows the photos in the selected layout.

● Print Module toolbar

The toolbar includes the navigation and photo selection controls. From the left:

Click here (■) to show the first page.

Click here (◀) to go to previous page.

Click here (▶) to go to next page.

Click the **Selected Photos** (■) to select the group of photos to use.

● Print Module left panel

Preview

The preview displays the Print layout style.

Template Browser

The Template Browser lists the Lightroom templates and custom user templates. Position the cursor over a template to view the print layout in the Preview window.

Collections

Select the photos to print from the Collections pane.

● Page Setup button

Click to set the paper size and orientation for custom presets.

● Print Settings button

Click to set the specific printer model options to add to custom presets.

● Print Module right panel

The right panel contains all the options for customizing your print layout design.

Layout Engine pane

The Layout Engine pane lists the options for the main layout.

Image Settings pane

The Image Settings set the options for the photos in the layout.

Layout pane

You can set the page margins and cell size and spacing.

Guides pane

You can set the nonprinting rulers and guides and image dimensions.

Overlays pane

Add information to appear on the prints. You can: add and edit your identity plate; add page-specific information; and add photo-specific information such as a title or copyright.

Print Job pane

You can select the specifics of the print job, including the print resolution, amount of sharpening, and color management preferences.

Print One button

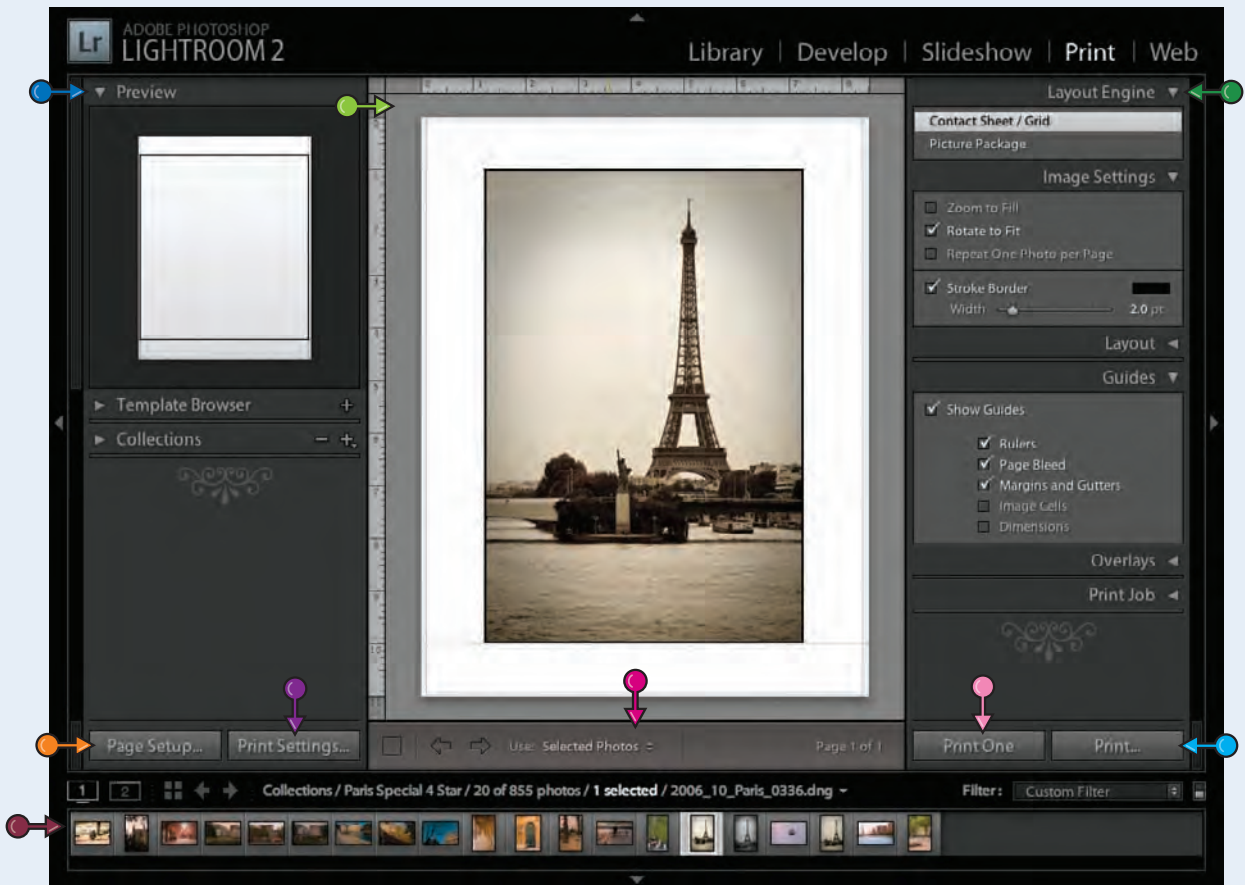
Click to print just one set of prints to the selected printer.

Print button

Click to set the specific printer options before printing.

Print Module Filmstrip

The Filmstrip remains consistent throughout all the modules.



Using a Lightroom Template to Prepare One Photo to Print

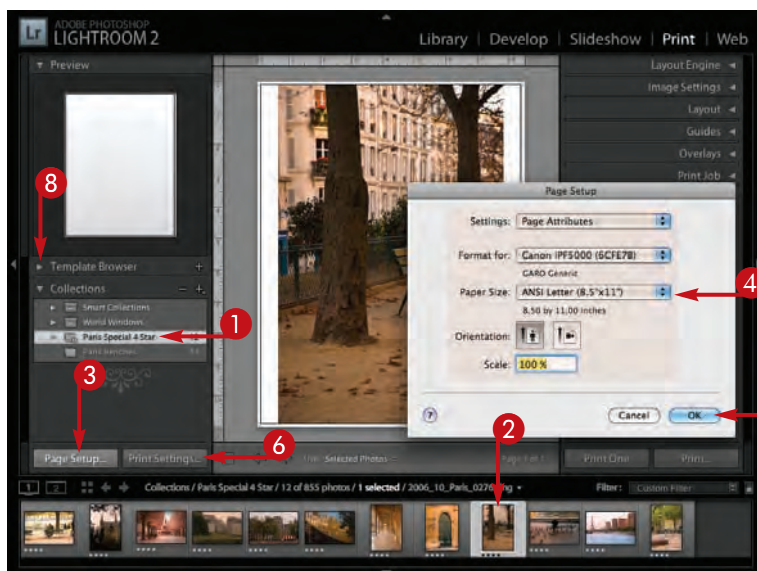
Lightroom's Print Template Browser makes it easy to experiment with different page layouts. You can quickly see how your page will look with one or multiples of one photo using the different templates and one photo selected.

The Page Setup and Print settings you use will depend on your specific printer.



Using a Lightroom Template to Prepare One Photo to Print

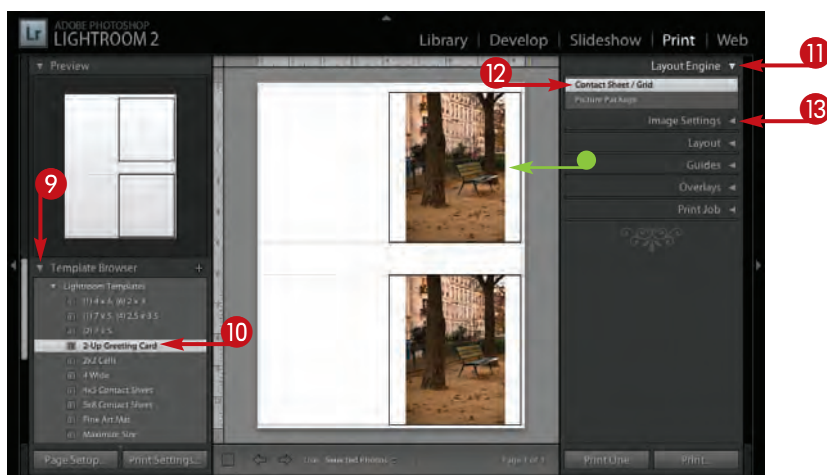
- 1 Click a collection in the Print module.
- 2 Click a specific photo in the Filmstrip.
- 3 Click the **Page Setup** button to open the Page Setup dialog box.
- 4 Select the settings for your printer model, paper size, and page orientation.
- 5 Click **OK** to close the dialog box.
- 6 Click the **Print Settings** button to open the Print dialog box.
- 7 When the dialog box appears, set the paper selection, color management, and other settings on your printer; click **Save** to save the settings and close the dialog box.



- 8 Click the **Template Browser** button.
- 9 Click the **Lightroom Templates** button.
- 10 Click a different template, such as **2-Up Greeting Card**.

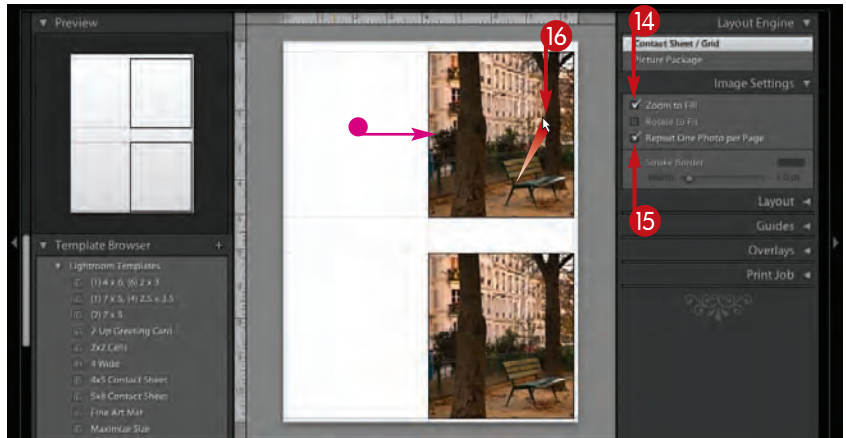
The main viewing area changes to show the photo in the Greeting Card layout template.

- 11 Click the **Layout Engine** button.
- 12 Click **Contact Sheet/Grid** if it is not already selected.
- 13 Click the **Image Settings** button.



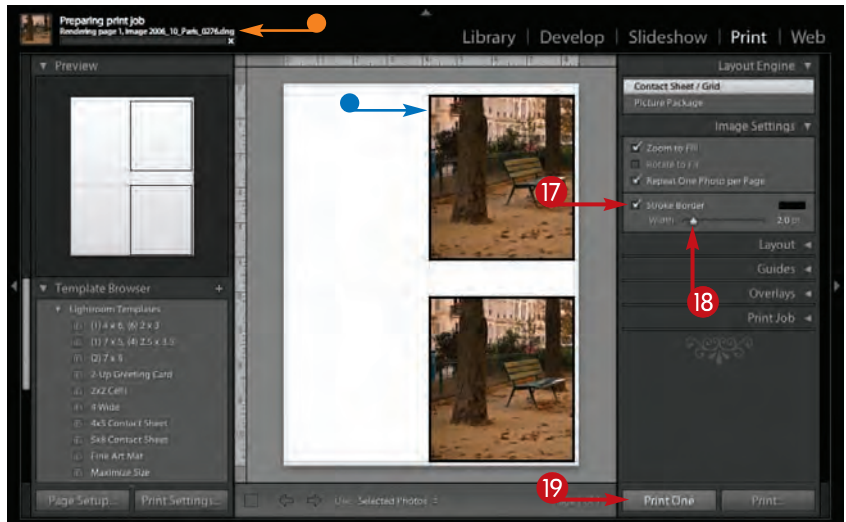
The Image Settings pane expands.

- 14 Click **Zoom to Fill** (☐ changes to ☑).
- The photos fill the frames of the greeting cards.
- 15 Click **Repeat One Photo per Page** if it is not already selected (☐ changes to ☑).
- 16 Click and drag in one photo to reposition the image.



- Both photos are repositioned inside the greeting card template.

- 17 Click **Stroke Border** (☐ changes to ☑).
- 18 Click and drag the **Width** (▲) to adjust the border size.
- 19 Click **Print One**.
- Lightroom sends one print to the selected printer and displays a progress bar.



TIPS

How do I change the stroke color?

Click in the color rectangle next to Stroke Border. Click anywhere in the color box that appears. To open more color options, click and drag in the color slider (●).



What is the difference between Print One and Print?

When you click **Print One**, Lightroom prepares the image, sends it to the selected printer, and the image is printed. When you click **Print**, the Print dialog box opens so you can select the specific printer and the settings you want to apply.

Print a Contact Sheet

Using the Contact Sheet/Grid layout engine, you can quickly print a contact sheet of a collection or a selection of images. You can select different contact sheet templates and adjust the settings and the information to be displayed on each photo.

When you first open the Print module, the Info Overlay appears at the top left corner of the page to be printed. Press **I** to turn off the Info Overlay which is on by default.



Print a Contact Sheet

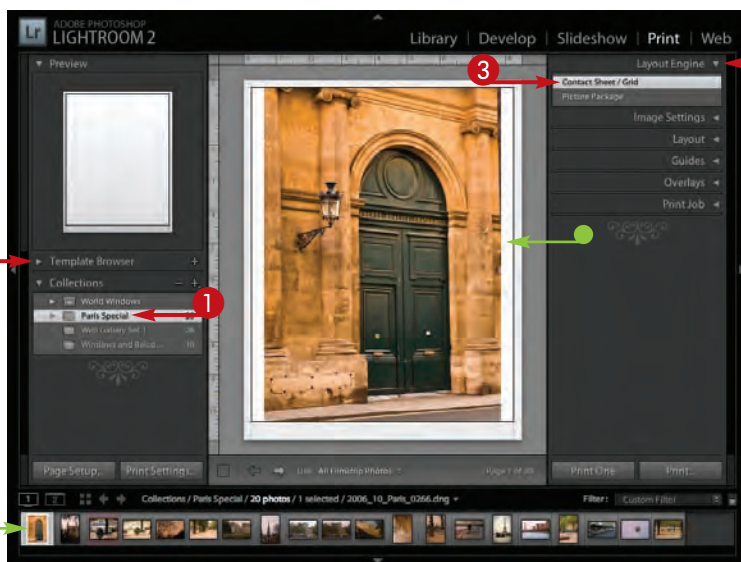
1 Click a collection in the Print module.

- The collection of photos appears in the Filmstrip, and the first photo appears in the main viewing area.

2 Click the **Layout Engine** .

3 Click **Contact Sheet/Grid**.

4 Click the **Template Browser** .



The Template Browser opens.

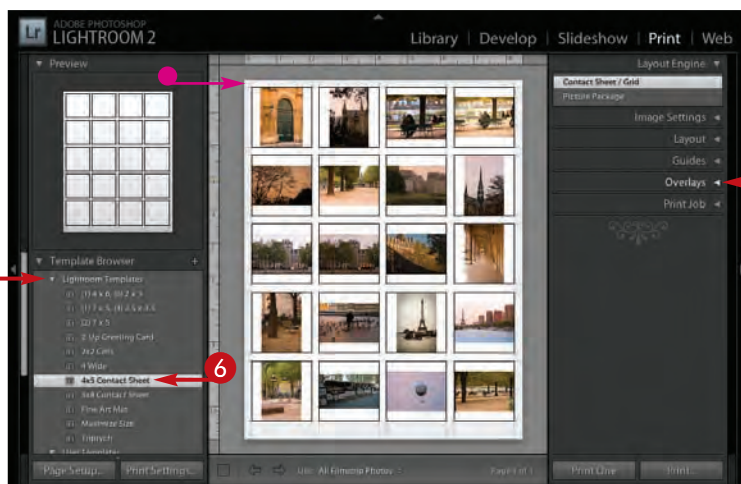
5 Click the **Lightroom Templates** .

6 Click **4x5 Contact Sheet**.

7 Press **A** to select all the photos in the collection.

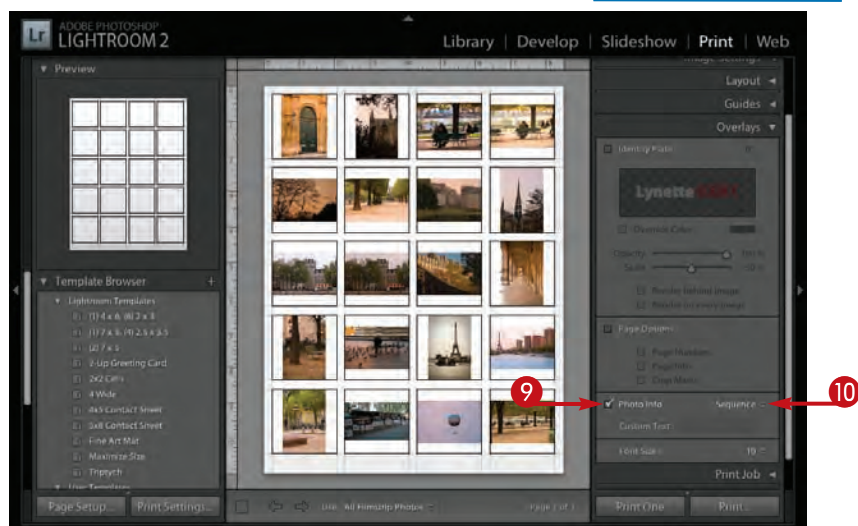
- The main viewing area displays a contact sheet of all the images in the collection.

8 Click the **Overlays** .



The Overlays pane expands.

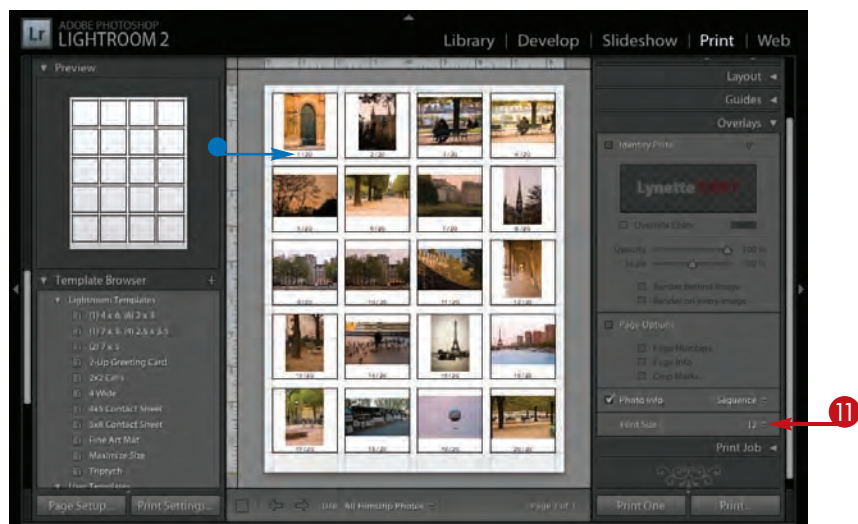
- 9 Click **Photo Info** (☐) changes to (☑).
- 10 Click the **Photo Info** (☑) and select **Sequence**.



- The image sequence numbers appear on the contact sheet.

- 11 Click the **Font Size** (A) and select a larger font size.

The sequence numbers print larger on the contact sheet.



TIPS

Is there a quick way to add photos to a collection from the Print module?

You can easily return to the Library module to add photos to a collection by double-clicking the name of the collection in the Collections pane in the Print module. Click and drag the photos to be added to the collection from a folder or other collection. To return to the Print module, click **Print** in the module picker or click **⌘ + Option + 4** (**Ctrl + Alt + 4**).

Can I change the order in which the photos are printed in the contact sheet?

Yes. Click the white border of one photo in the Filmstrip to deselect the other photos. Click and drag any photo in the Filmstrip to a different position. Then press **A** to reselect all the photos, and the photos appear in the new order on the Contact Sheet.

Add Overlay Text or Graphics to Prints

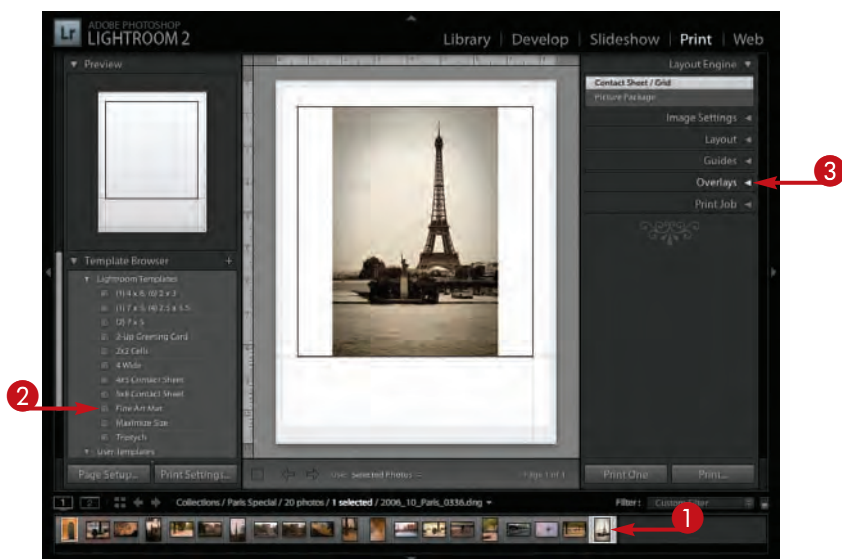
As shown in the previous task, you can add information about the photos, such as image sequence number, a caption, or the camera equipment used, to a print layout. Using the Overlays pane in the right Print module, you can also add your identity plate or another graphic or text, such as a copyright watermark to prints.



Add Overlay Text or Graphics to Prints

ADD YOUR IDENTITY PLATE TO A PRINT

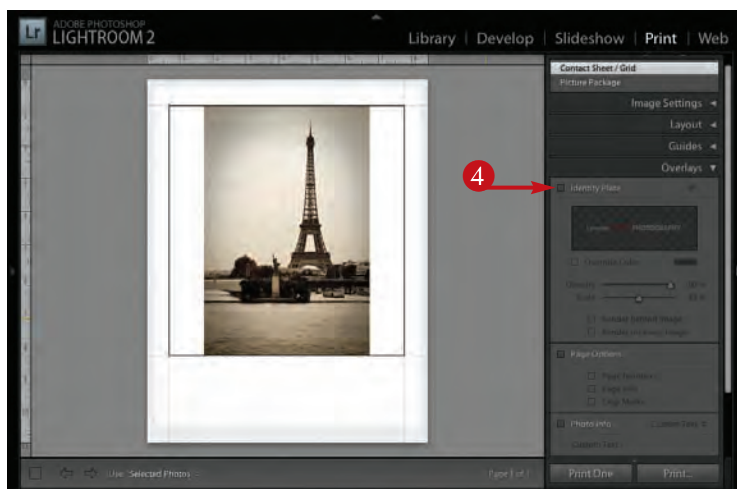
- 1 Repeat Steps 1 to 4 in the previous task.
 - 2 Click **Fine Art Matte** in the Template Browser.
- Note: You can select a different template.*
- 3 Click the **Overlays** button.



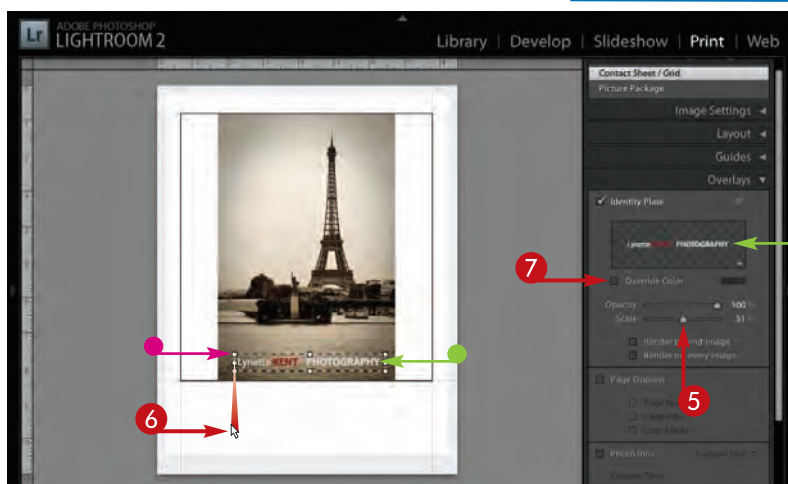
The Overlays pane expands.

*Note: Optionally, press **F7** to close the left panel and expand the main viewing area.*

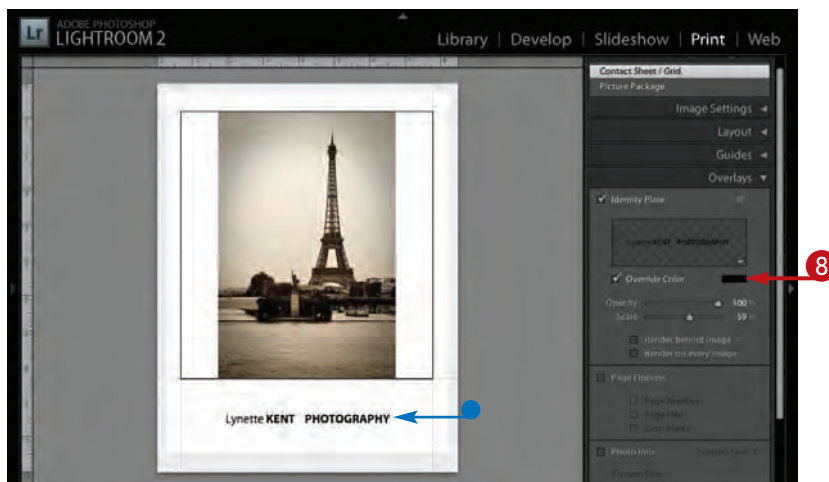
- 4 Click **Identity Plate** (the icon changes to).



- The currently selected identity plate appears on the page.
- 5 Click and drag the Scale slider to adjust the size.
- You can also click and drag the selection handles to adjust the size.
- 6 Click the identity plate to drag it to a different position on the page.
- 7 Click **Override Color** (☐ changes to ☑).



- The identity plate text now appears in black in the new position on the page.
- 8 Click in the color rectangle next to Override Color.



TIPS

Can I add both an identity plate and photo information to the same print layout?

Yes, depending on the layout engine used. Contact sheets and grids can have both an identity plate and photo information, as well as page numbers, page information, and crop marks. Picture packages can have only an identity plate or a graphic identity design applied but can show the Cut Guides.



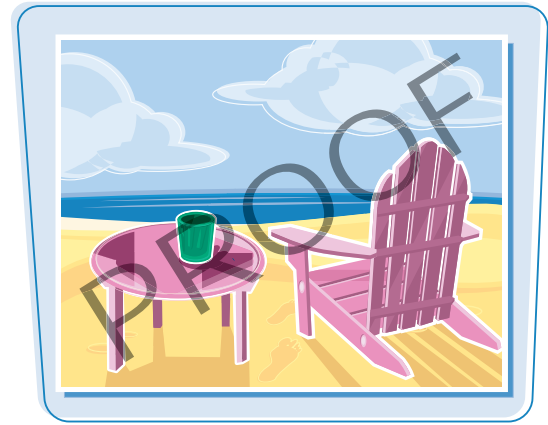
Can I resize a graphic identity plate to fill the area below my photo?

The graphical identity plate image is limited to 57 pixels high, so the graphic would be very pixelated if you stretch it to fit a printed page. You can, however, resize a regular or text-based identity plate.



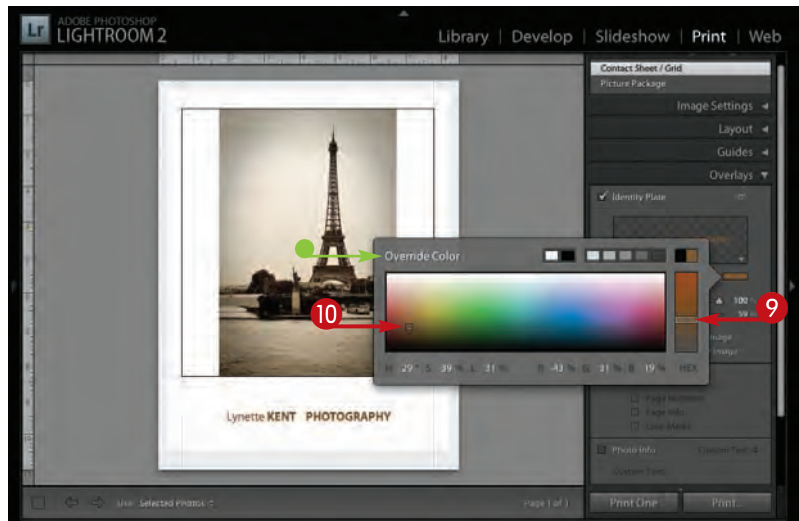
Add Overlay Text or Graphics to Prints (continued)

You can use the same Overlay pane to apply a watermark on prints. You can add a copyright or the word *proof* as a watermark when you first print the photos and submit them to clients for approval. You can fade the watermark and even rotate it to fit across the page.



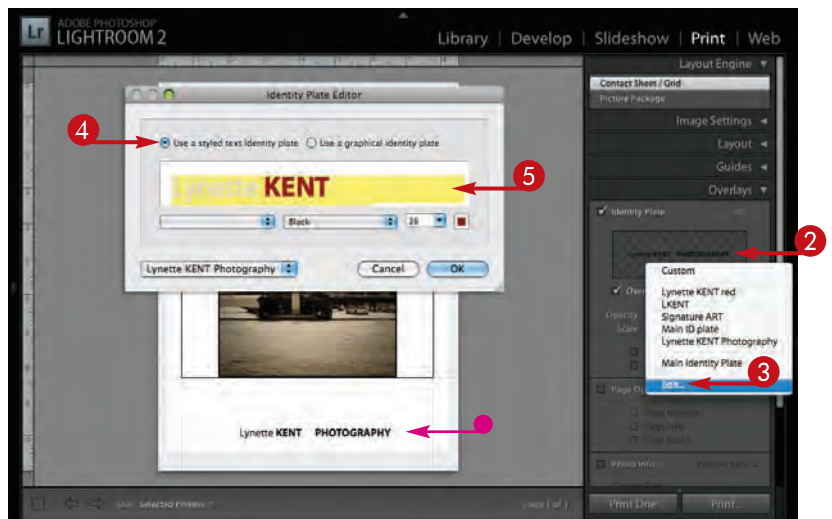
Add Overlay Text or Graphics to Prints (continued)

- The Override Color selector appears.
- 9 Click and drag the color slider to change the colors.
- 10 Click in the main color selector to change the text color.
- 11 Press **Return** (**Enter**) to apply the color.

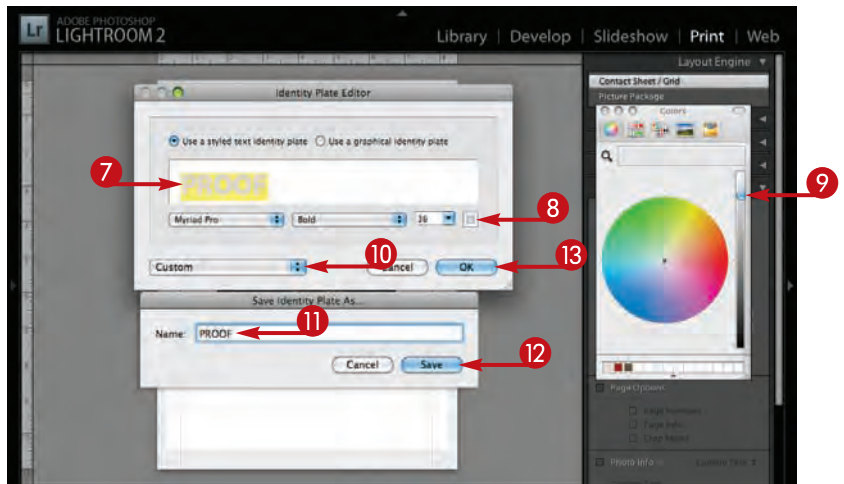


ADD A WATERMARK AS AN OVERLAY

- 1 Repeat Steps 1 to 4 above.
- The Fine Art Matte template displays the currently selected identity plate.
- 2 Click in the Identity Plate box or click the .
- 3 Click **Edit** in the menu that appears.
The Identity Plate Editor appears.
- 4 Click **Use a styled text identity plate** (the radio button changes to).
- 5 Click in the text box.
- 6 Press **⌘+A** (**Ctrl+A**) to select all the text.

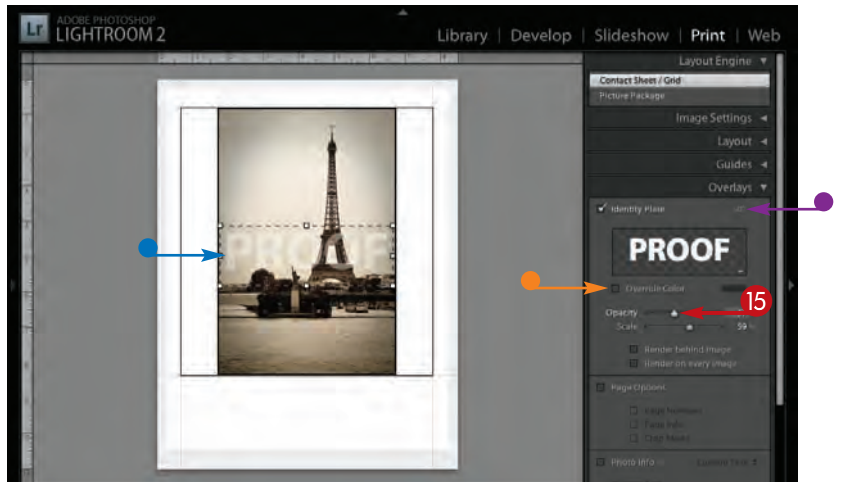


- 7 Type your text, such as **PROOF**, or your copyright.
- 8 Click the Identity Plate color box ().
- 9 Click a light gray in the color picker that appears.
- 10 Click the **Custom** .
- 11 Type a name for the custom identity plate.
- 12 Click **Save**.
- 13 Click **OK** in the Identity Plate Editor.



- **PROOF** or your copyright appears on the page.
- Click **Override Color** to deselect if it is still checked from the previous task (☑ changes to ☐).
- 14 Click and drag the text over the photo.
- 15 Click and drag the **Opacity** slider to lower the visibility.
- Click the **Rotate Identity Plate** (0°) and select a rotation amount.

Note: Optionally, you can also click and drag the **Scale** to change the size of the word **Proof**, or click **Render on every image** so the word **proof** appears on every photo.



TIPS

How do I deselect all the photos in the Filmstrip, to select only one?

To select all the photos, you press **⌘+A**. To deselect them all, press **⌘+D**. To deselect them and select only one, click in the frame around the photo, not in the image, in the Filmstrip. The rest of the photos will be deselected, leaving only the one you clicked.

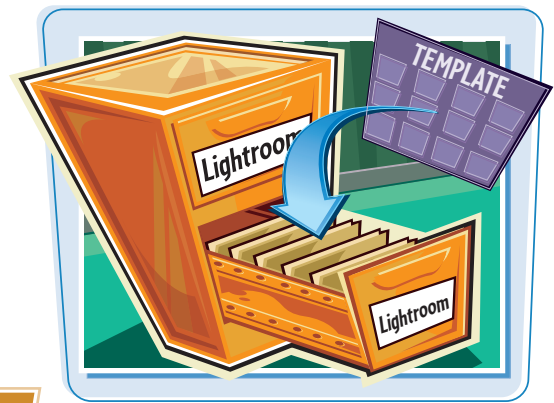


Will the black line I see around my photo in the main viewing area be visible in the print?

The outside black line is only a guide. Set your print layout and then uncheck all the options in the Guides pane to view the page as it will print. You can add a stroked border to the photo that will show in the print. Use the Image Settings pane, click **Stroke Border** (☐ changes to ☑), and select the stroke width and color.

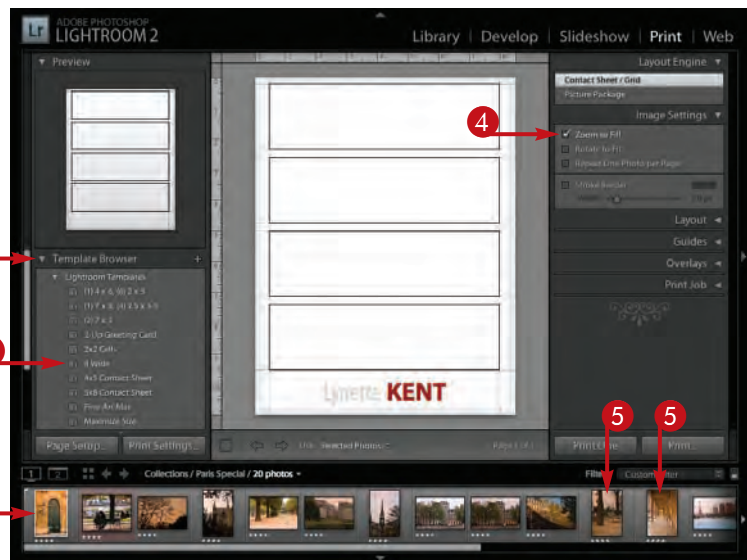
Customize and Save an Existing Lightroom Print Template

Starting with one of Lightroom's print templates, you can easily customize the image as it appears in the layout to create a custom template. You can save your customized template so you can use it again with different images the next time you print.

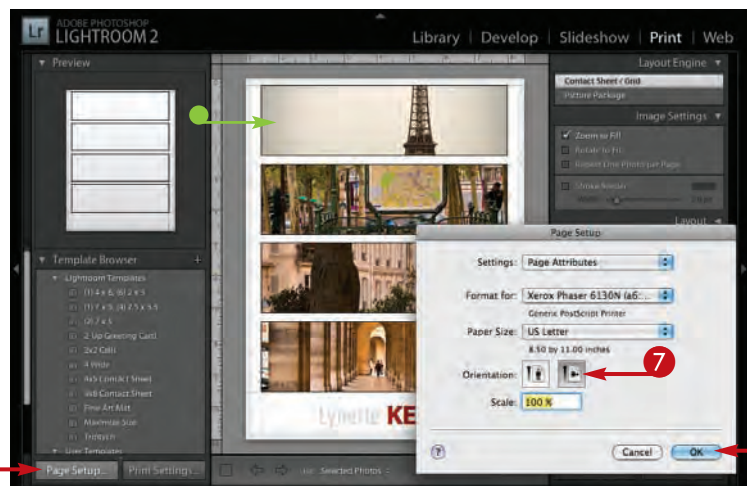


Customize and Save an Existing Lightroom Print Template

- 1 Click a collection in the Print module.
 - 2 Click the **Template Browser** ► to open the Template Browser pane.
 - 3 Click a template such as **4 Wide**.
- Note:** You can select any of the templates and change them the same way.
- 4 Click **Zoom to Fill** under the Image Settings pane (☐ changes to ☑).
 - 5 ⌘+click (Ctrl+click) four portrait (vertical) photos in the Filmstrip.







- The photos appear in the template in the main viewing panel.
- 6 Click **Page Setup** in the left panel. The Page Setup dialog box appears.
 - 7 Click an Orientation icon, **Landscape** (🖼️) in this example.
 - 8 Click **OK**.
- Note:** You can select specific settings for your printer and save them with the template by clicking the left panel **Print Settings** button.



The page appears in landscape orientation.


Note: The 4 Wide template automatically fills the cells.

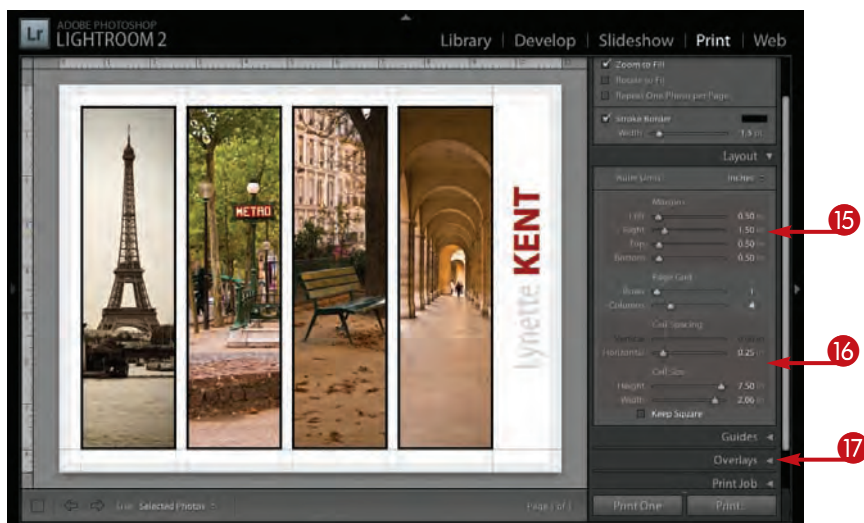
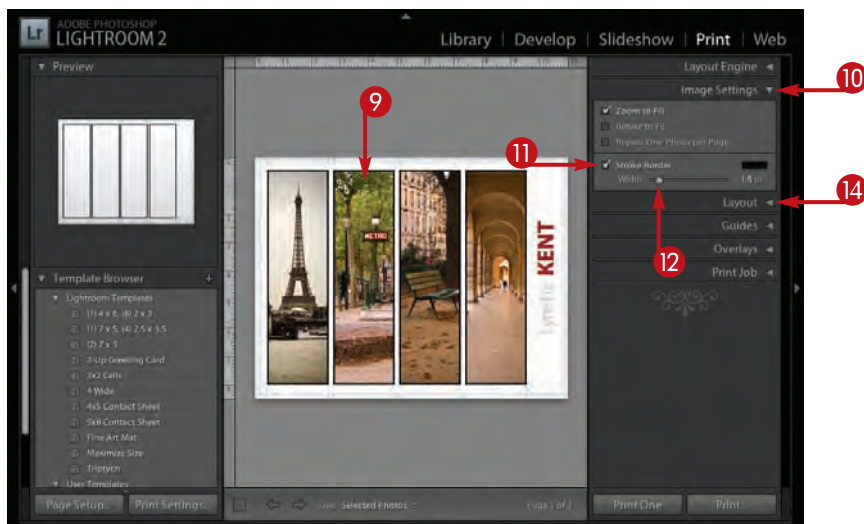
- 9 Click and drag in each cell to adjust the photo.
- 10 Click the **Image Settings**  to expand the pane.
- 11 Click **Stroke Border**  changes to .
- 12 Click and drag the **Width** slider to resize the stroke.
- 13 Press **F7** to hide the left panel.
- 14 Click the **Layout** .

The Layout pane expands.

- 15 Click and drag any of the margin sliders to change the margins.

Note: You can also click directly on the margin measurements and type a new margin setting.

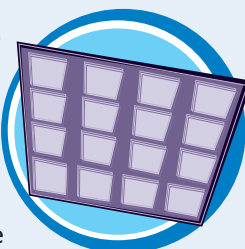
- 16 Repeat Step 15 for the Cell Spacing and Cell Size options.
- 17 **Option**+click (**Alt**+click) the **Overlays**  to open the Overlays pane and close the Layout pane.



TIPS

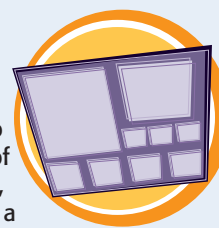
What happens if I change the Rows and Columns under Page Grid?

The results depend on whether you are using a portrait or landscape page orientation. Increasing the number of rows adds more image cells horizontally on the page. Increasing the number of columns adds more cells vertically to the page. You can then select more photos from the Filmstrip to use in the added cells.



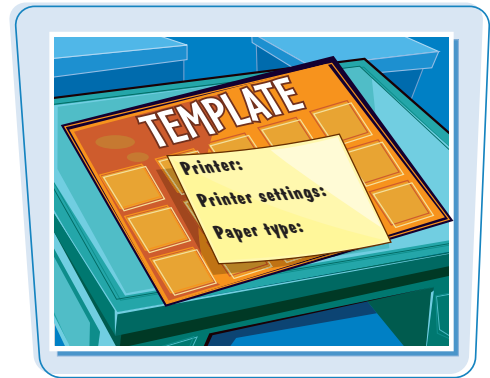
Can I make the individual cells different sizes?

Not in the 4 wide template design. To create a template of different sized cells, you need to create a custom picture package as in the next pages of this task.








Customize and Save an Existing Lightroom Print Template (continued)

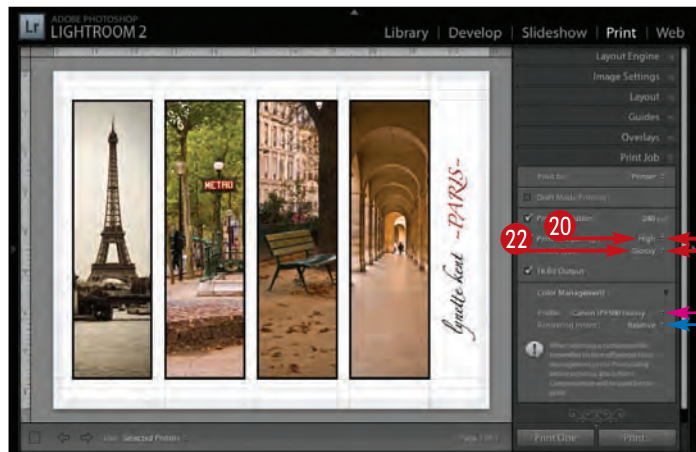
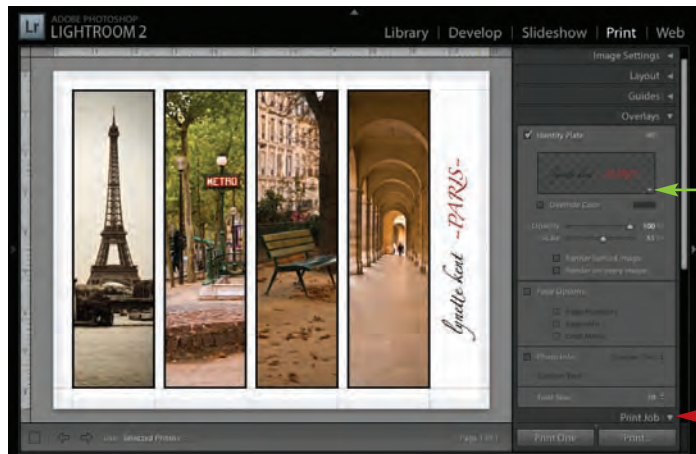
Not only can you set the parameters for the page of your custom layout, you can also specify the specific printer, paper type, and printer settings to use with this custom template. Once saved, you can quickly apply the template to any group of images in a selected collection.



Customize and Save an Existing Lightroom Print Template (continued)

Note: The identity plate is selected because it is part of the 4 Wide template.

- You can click in the Identity Plate pane and select a different identity plate or follow the steps in the previous task, "Add Overlay Text or Graphics to Prints," to change the text.
- 18 **Option**+click (**Alt**+click) the **Print Job**  to open the Print Job pane and close the Overlays pane.
- 19 Click the **Print Sharpening** .
- 20 Click the level of sharpening for your intended use.
- 21 Click the **Media Type** .
- 22 Click the paper surface.
- You can click the Color Management **Profile** , click **Other**, and select a paper profile from the list for your selected printer.
 - You can click the **Rendering Intent**  and select **Relative** or **Perceptual**.



23 Click **Print**.

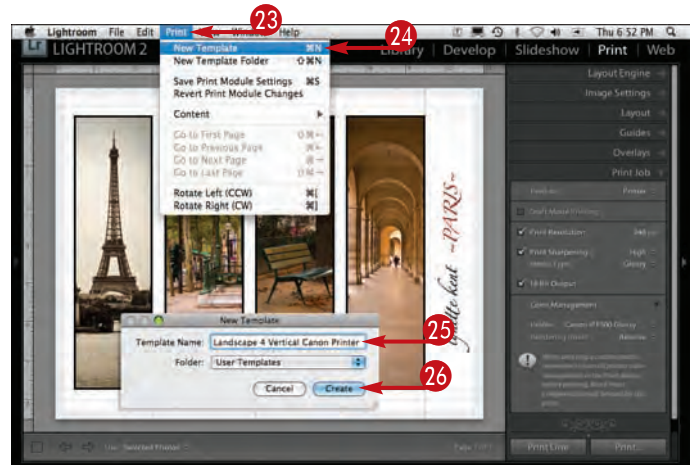
24 Click **New Template**.

The New Template dialog box appears.

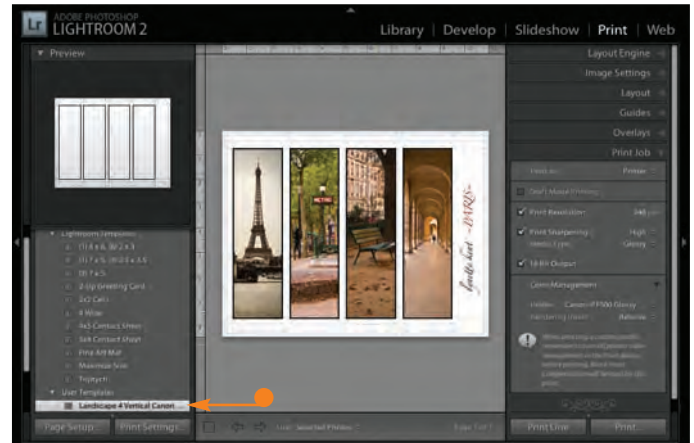
25 Type a name in the dialog box.

26 Click **Create**.

27 Press **F7** to make the left panel reappear.




- Your custom template is listed under User Templates in the Print module left panel.





TIPS

What is the Print to arrow used for?

When you click the **Print to** , you can select **JPEG file** and set the File Resolution, Print Sharpening, File Dimensions, and Color Management options to save the template or output the complete page as a JPEG file.

Can I create a template with three perfectly square images?


Yes. In the Layout pane, set the Columns to 3 and click **Keep Square in the Cell Size** ( changes to ). Adjust the margins, and then click and drag the **Cell Size Height** slider to adjust the size of the square cells.

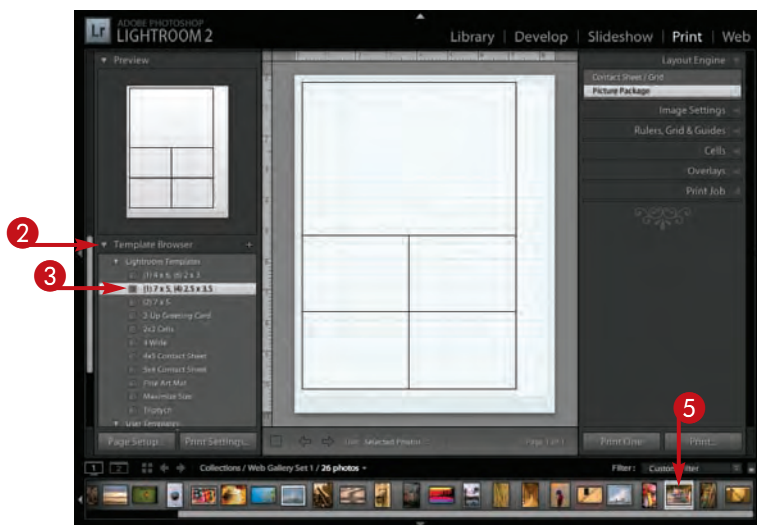
Prepare a Picture Package for Printing

The Picture Package option in the Print module includes layouts for multiple prints of the same photo on one page. You can easily select a template, make any modifications in the right panel, and select multiple images in the Filmstrip. Lightroom creates a complete page of each of the selected photos and sends them to the selected printer.






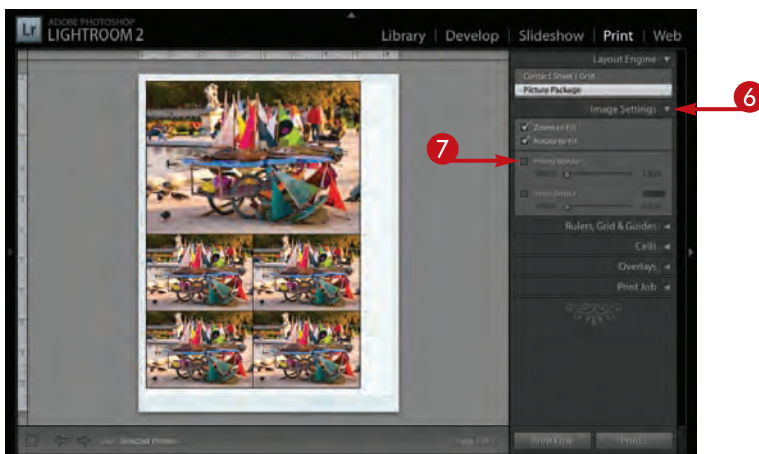
Prepare a Picture Package for Printing

- 1 Click a collection in the Print module.
- 2 Click the **Template Browser**  to expand the Template Browser pane.
- 3 Click a template, (1) 7 x 5, (4) 2.5 x 3.5 in this example.
- 4 Press **F7** to hide the left panel.
- 5 Click a photo in the Filmstrip.



The photo fills all the cells in the main viewing area.

- 6 Click the **Image Settings**  to expand the pane.
- 7 Click **Photo Border**  changes to .



8 Click and drag the **Width** slider to increase the white photo border around each image.

• You can also click the number and type a specific size photo border.

9 Click **Inner Stroke** (☐ changes to ☒.

10 Click and drag the **Width** slider to increase the stroke.

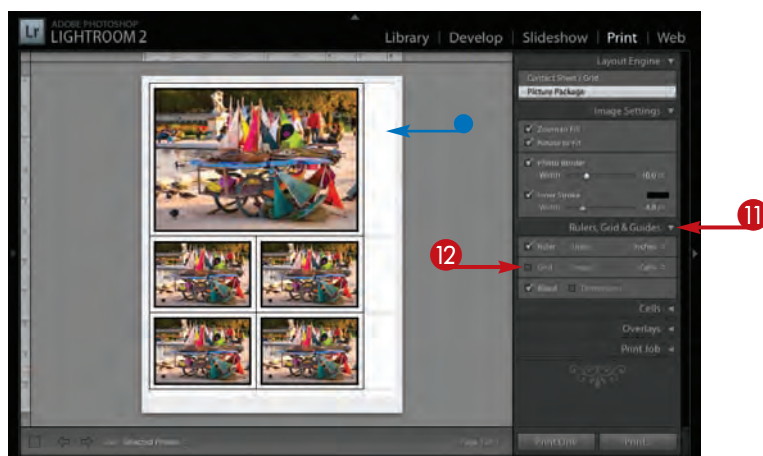
• You can click the number and type a specific size stroke.



11 Click the **Rulers, Grid & Guides** ☐ to expand the pane.

12 Click **Grid** to deselect it (☒ changes to ☐.

• The grid is hidden so you can see the print and the cut lines.



TIPS

Do I need to resize my images for printing?

No. You set the parameters of the page you want to print in the Layout pane and determine the print resolution in the Print Job pane. Lightroom automatically samples the image up or down to produce a print with the correct number of pixels for the dimensions you selected.



Will the grid print if I leave the box checked?

No. The markings on the page that are controlled with the Rulers, Grid & Guides pane are only for your reference and do not print.




Create a Custom Picture Package

You can start with a blank page to create a custom picture package layout, and save your design as a new template. You can include varied sizes of picture cells, and Lightroom lays them out to best fit the page. If additional pages are needed to fit the photo cells, Lightroom automatically increases the page count.

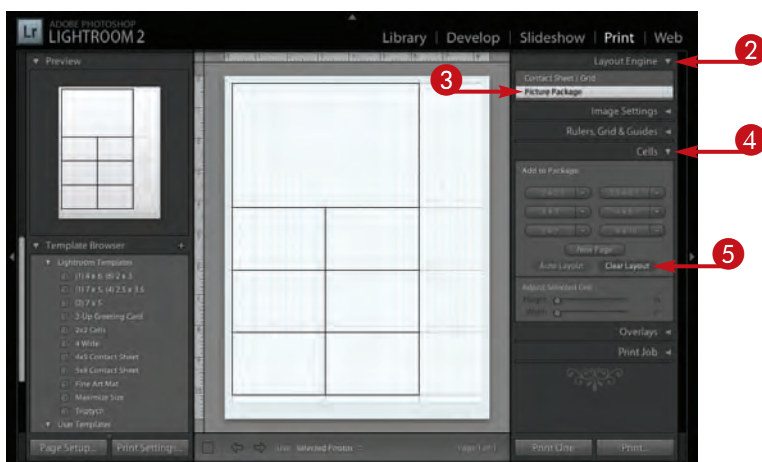


Create a Custom Picture Package

- 1 Click a collection in the Print module.
- 2 Click the **Layout Engine**  to expand the pane.
- 3 Click **Picture Package**.

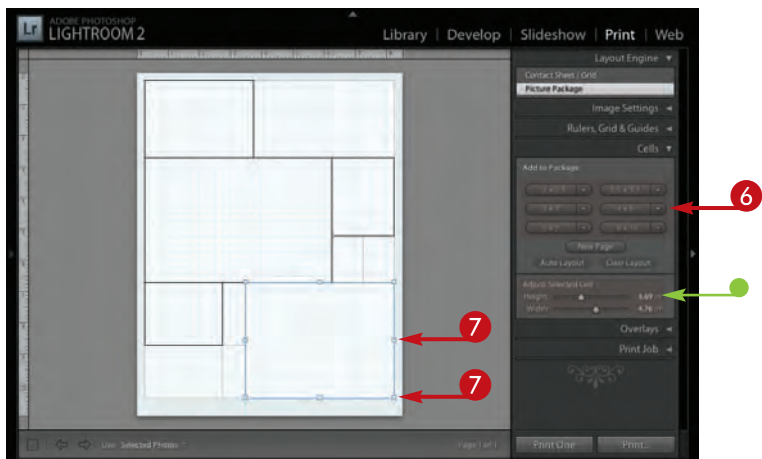
Note: The last Picture Package template selected appears in the main viewing area.

- 4 Click the **Cells**  to expand the pane.
- 5 Click **Clear Layout**.



The main viewing area cells disappear.

- 6 Click any of the preset cell sizes.
- The cells are automatically placed and rotated to fit the page.
- 7 Click and drag the cell handles to adjust the size.
- You can also click the Adjust Selected Cell Height and Width numbers to adjust them.
- 8 **Option**+click (**Alt**+click) and drag any cell to duplicate it.



The layout adjusts to fit the number of cells and sizes.

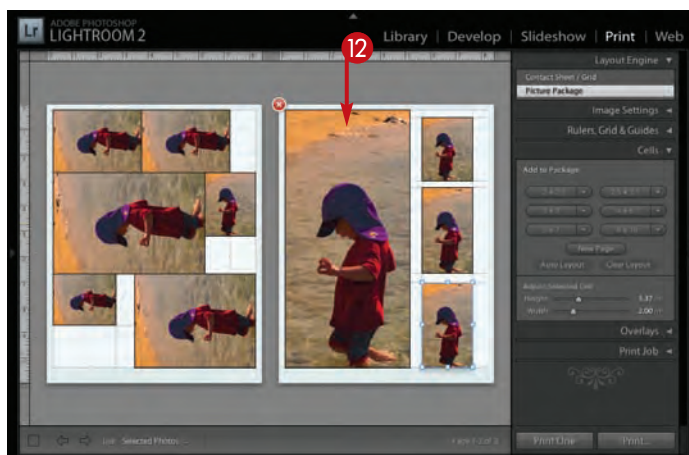
- 9 Click a photo in the Filmstrip.
- The photo fills each cell.
- 10 Click the warning symbol (⚠) to reveal any overlapping cells.
- 11 Click and drag the overlapping cells to reposition them.



- 12 ⌘+click (Ctrl+click) and drag in the cells to reposition the photos within any cells with different aspect ratios.

Note: Optionally, repeat any of the steps in previous tasks to add photo border or strokes, or change margins and cell spacing.

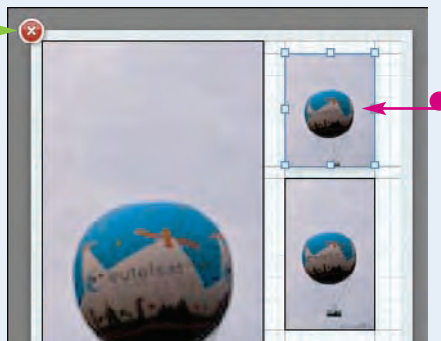
- 13 Repeat Steps 23 to 26 of the “Customize and Save an Existing Lightroom Print Template” task to save and name the new picture package template.



TIPS

How do I remove a page or a cell?

To remove a page, position the cursor over the page and (●) click the close button (⌵). To remove a cell, click the cell (●) and press **Delete** (**Backspace**).



Why does the page bleed area appear asymmetrical?

Each type of printer requires a different amount of bleed along the edges. Lightroom’s Page Bleed displays the amount of bleed the selected printer requires and adjusts the margins accordingly so your image prints centered.

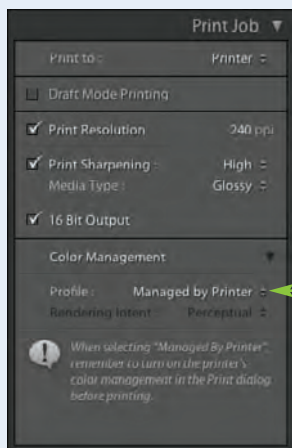
Understanding the Color Management Options

You select the printer model in the Print dialog box by clicking the Print Settings button. You then set the Color Management options in the Print Job pane to have the printer or Lightroom control the color.



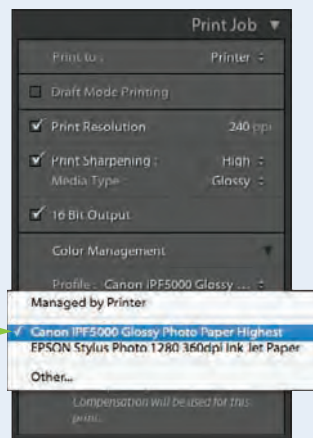
Using Color Managed by Printer

Managed by Printer (●) is the default setting for the Color Management Profile. Using this setting with a newer printer model can produce reasonable prints, especially for draft mode printing or contact sheets. You must always set the Media Type in the Print Settings dialog box to match the paper used.



Using Lightroom to Manage the Print Color

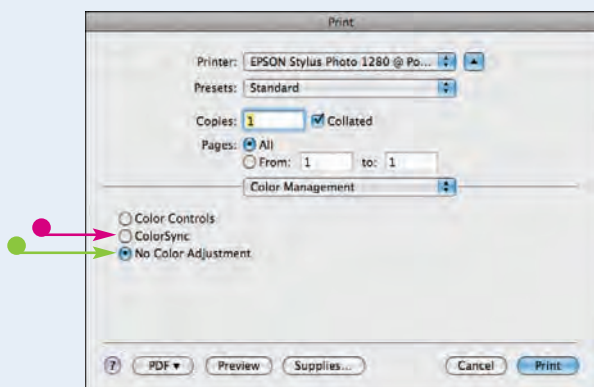
For high-quality prints, having Lightroom manage the color can produce a more color-correct print. Click the **Profile** [] and select a profile (●) from the list that appears. These profiles include custom profiles you create using a ColorMunki or i1Photo spectrophotometer for your specific printer and paper type, any generic profiles that come with the printer driver, or any profiles you downloaded for specific papers you purchased from various paper companies.



Settings for Printer Driver Color Control

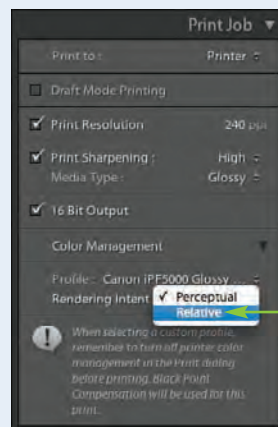
When you select a specific profile and have Lightroom manage the color, you must turn off the printer's color controls by selecting **No Color Adjustment** (●) in the Color Management Controls.

When you let the printer manage the color, you must set the Color Management controls in the printer driver's Print dialog box to **ColorSync** (●) for Mac or **ICM Color Management** for PC.



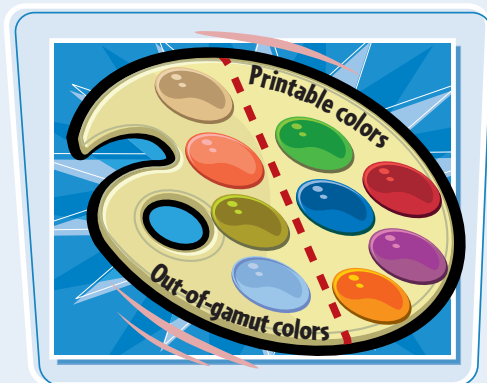
Rendering Intent

ProPhoto, Lightroom's working color space, has a wider color gamut, or range, than a printer can print. When you select a custom profile, you set the rendering intent (●) for printing those colors that are out of the printable range.



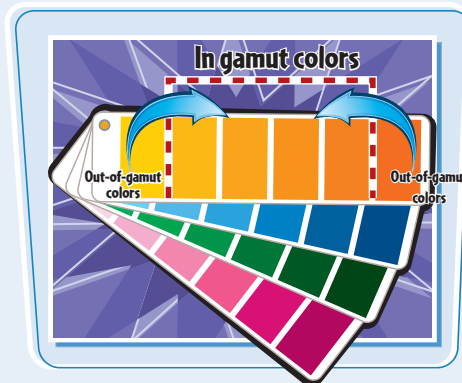
Perceptual Rendering Intent

Selecting **Perceptual** makes the printer shift out-of-gamut colors to printable colors, and in doing so, slightly shifts in-gamut colors to maintain the visual or perceptual relationships among all the colors in the image.



Relative Rendering Intent

Selecting **Relative** forces the printer to print the in-gamut colors as they are, and shifts only the out-of-gamut colors to the closest relative color it can print.



CHAPTER

11

Creating Web Galleries with Your Photos



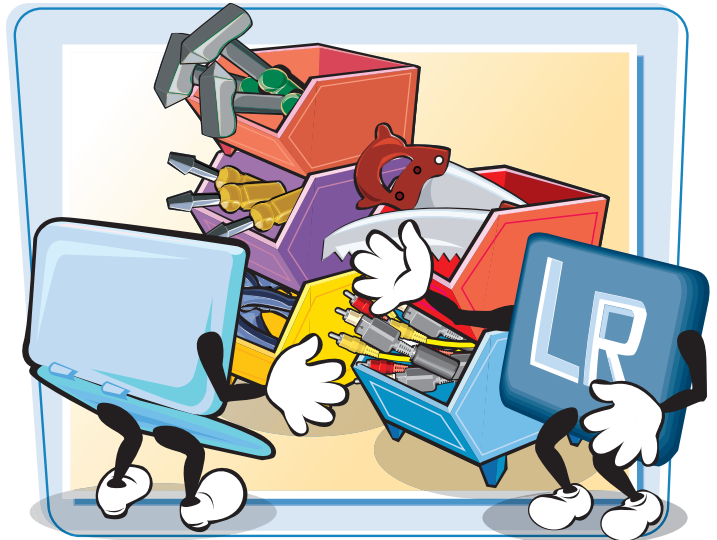
Lightroom makes it easy for you to design, build, and upload professional-looking photo galleries without knowing any Web page technology. You can use the Web gallery like an online lightbox to show images to a client for proofing, or share specific collections or even your entire portfolio on the Web.



Locating the Parts of the Web Module	274
Using a Template to Create a Web Gallery	278
Customize a Web Gallery Template	280
Managing Your Custom Web Gallery Templates	284
Export Your Web Gallery	286
Upload Your Web Gallery to a Web Site	288

Locating the Parts of the Web Module

Getting to know the parts of Lightroom's Web module and how the editing tools function makes creating a custom Web gallery very easy. As with the other Lightroom modules, all the tools you need are available in the main interface, without having to hunt through hidden menus. The center section displays your photo gallery as it will appear on your Web page and automatically updates the design as you make changes.



● **Web Module Main Gallery panel**

The Main Gallery displays the selected Web gallery template design including the selected photos, title options, and gallery navigation as it will appear on the Web site.

● **Web Module left panel**

● **Preview**

The Preview displays the selected Web gallery template style. Position the cursor over a template to view the preset Web gallery layout in the Preview window.

● **Template Browser**

The Template Browser lists all the preset Web gallery templates and any custom user templates you create and save.

● **Collections pane**

The Collections pane shows your photo collections from which you can easily build Web galleries.

● **Preview in Browser button**

You can preview your Web gallery creation in Web browsers such as Safari or Internet Explorer.

● **Scroll bar**

Click and drag to view expanded options panes.

Web Gallery toolbar

The toolbar includes the controls for navigating and selecting the photos to be used in the Web gallery. From the left:

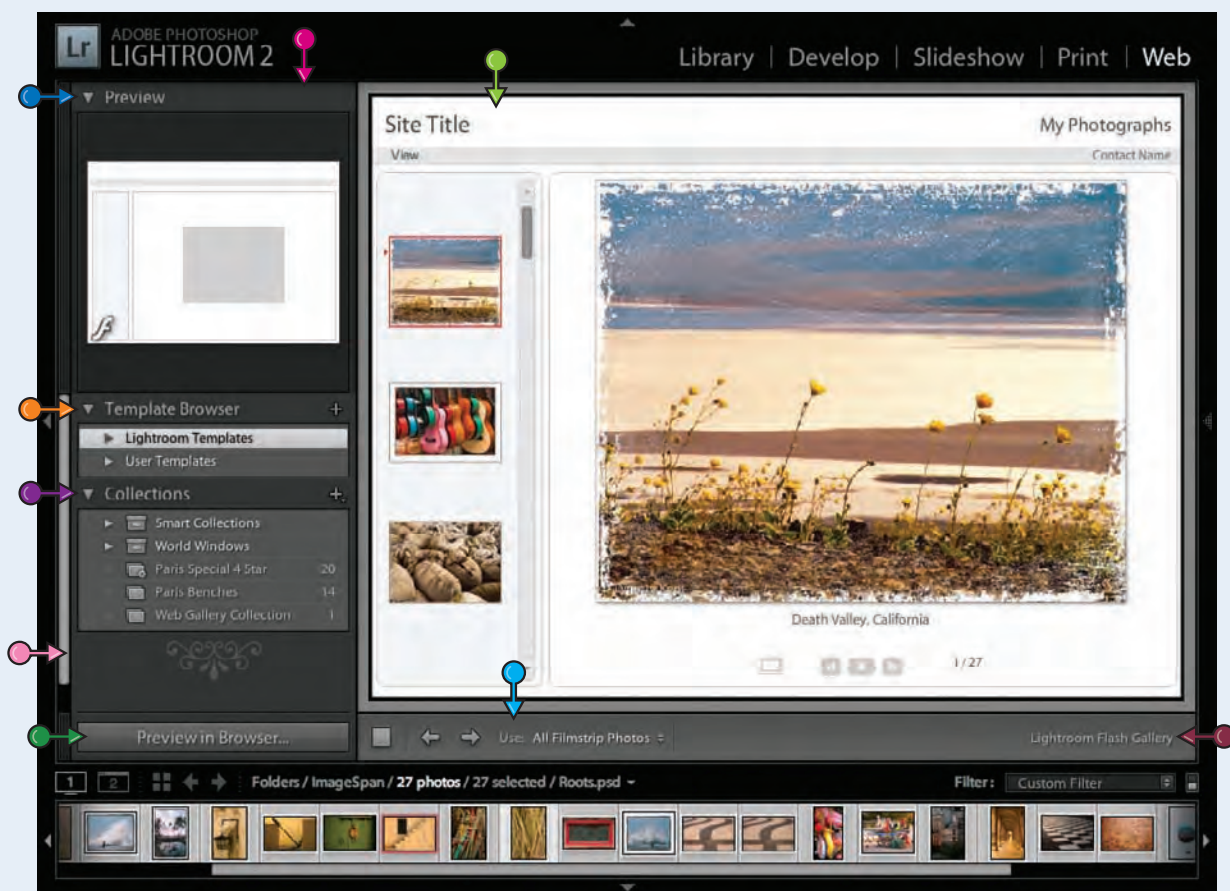
Click here (■) to go to first page of Web gallery.

Click to go to previous photo (◀).

Click to go to next photo (▶).

Click here (■) to select photos to use for Web gallery.

Name of Gallery style in use.



Locating the Parts of the Web Module *(continued)*

The Preview area at the top of the left panel displays a preview of the different templates in the Template Browser. You can look at your current Web gallery in the center section and see a different style of gallery design in the Preview pane. The side panels include preset templates as well as customization options. The Filmstrip and Filmstrip tools on the bottom of the screen are the same in all the modules.



- **Web Module right panel**

The right panel contains all the options for customizing your Web gallery design.

- **Engine pane**

You can select a style of Web gallery. You can also purchase or download other custom Web gallery styles.

- **Site Info pane**

You can enter the information to be displayed in the particular Web gallery design and select an Identity plate.

- **Color Palette pane**

You can use the color palette to change the text, background, and function colors to customize your Web gallery.

- **Appearance pane**

You can customize the look of the photo borders and pages specific to the selected Web gallery template.

- **Image Info pane**

You can add labels to the photos and customize them to suit your design.

- **Output Settings pane**

You can change the size of the display image, add any metadata and a copyright watermark to the display, and specify the sharpening to be applied.

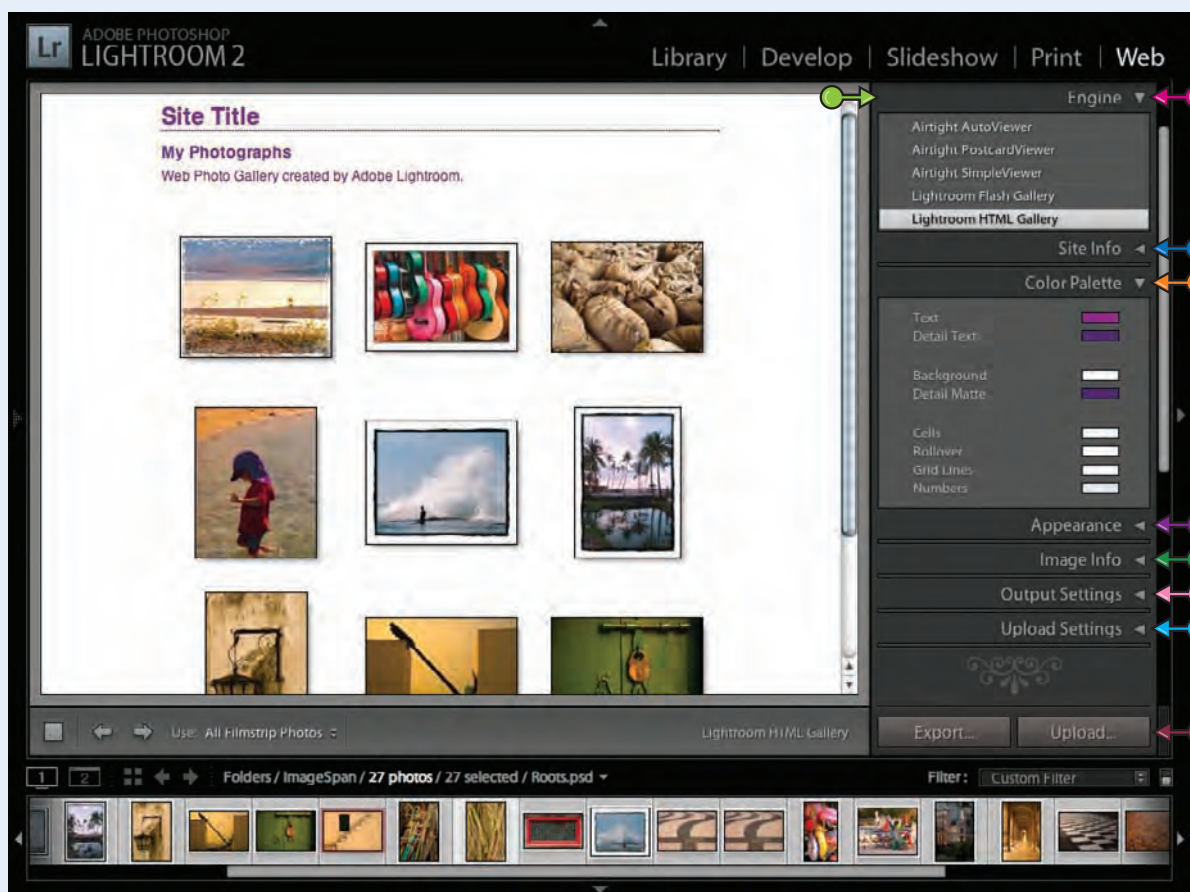
- **Upload Settings pane**

You can enter the settings to upload the Web gallery directly to an FTP server from within Lightroom.

- **Export and Upload buttons**

You can click the Export button to export your designed Web gallery to save it on your hard drive.

You can click the Upload button to upload the Web gallery directly to your FTP server.



Using a Template to Create a Web Gallery

Lightroom's Web module includes a number of predefined Web gallery styles you can use to quickly build a Web gallery page with any of the photos in your catalog. By grouping your images in a Collection in the Library module first, you can easily add or remove images from the Web gallery and rearrange their display order.



Using a Template to Create a Web Gallery

Note: Create a collection of photos using the Library module first as shown in Chapter 3.

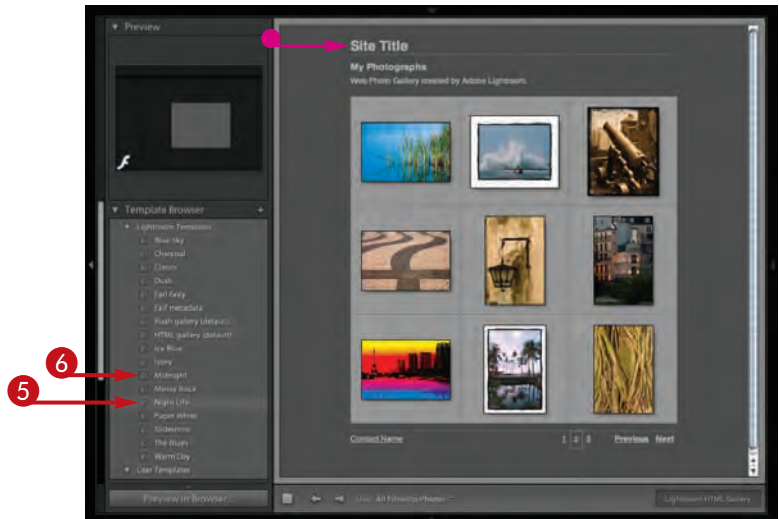
- 1 Click the **Web** module.
- 2 Click the **Collections** ▾ to open the Collections pane.
- 3 Click a Collection.
 - The photos in the collection appear in the Filmstrip.
- 4 Press the **Template Browser** ▾.



The Template Browser pane opens.

Note: Press **F6** to hide the Filmstrip if necessary to see both the Preview pane and the Template Browser pane or use the scroll bar to see all the included templates.

- 5 Position the cursor over a template design in the list.
 - The Preview pane displays a sample of the Web gallery design.
- 6 Click a template, such as **Midnight**.



Note: The following steps show the options for an HTML Web gallery. Some options in the right panel will be different if you select a Flash Web gallery.

- The Main Gallery panel shows the collection as a styled Web gallery.

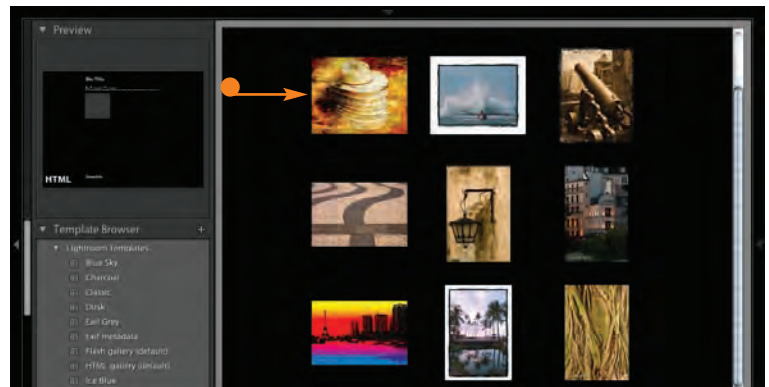
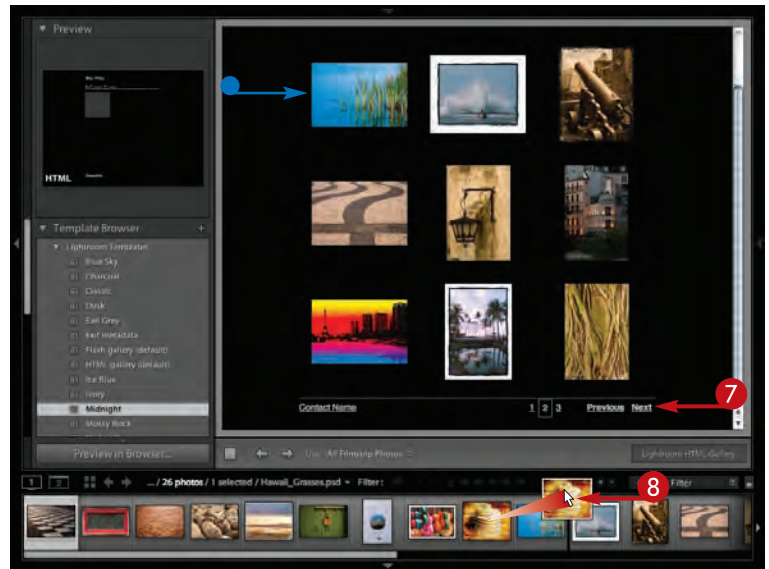
- 7 Click **Next** to view the next page layout.

The next set of images appears in the Web gallery design.

Note: Press **F6** to show the Filmstrip if necessary.

- 8 Click and drag a photo in the Filmstrip to a different location.

- The display order in the Web gallery changes accordingly.



TIPS

What are the advantages of creating a collection before designing my Web gallery?

By grouping your photos into a collection, you can make adjustments across all the photos, or add or remove photos from the Web gallery. In addition, you can rearrange the display order in the Filmstrip without returning to the Library module.

What is the difference between an HTML gallery and a Flash gallery?

HTML gallery pages are directly compatible with most browsers. Flash gallery pages require the viewer to have the Adobe Flash Player plug-in installed. However, a Flash gallery can be more interesting because it can include slide shows with transitions as well as animations and special effects. The type of gallery you have selected is shown by the logo in the Preview pane and listed in the toolbar below the main gallery panel.

Customize a Web Gallery Template

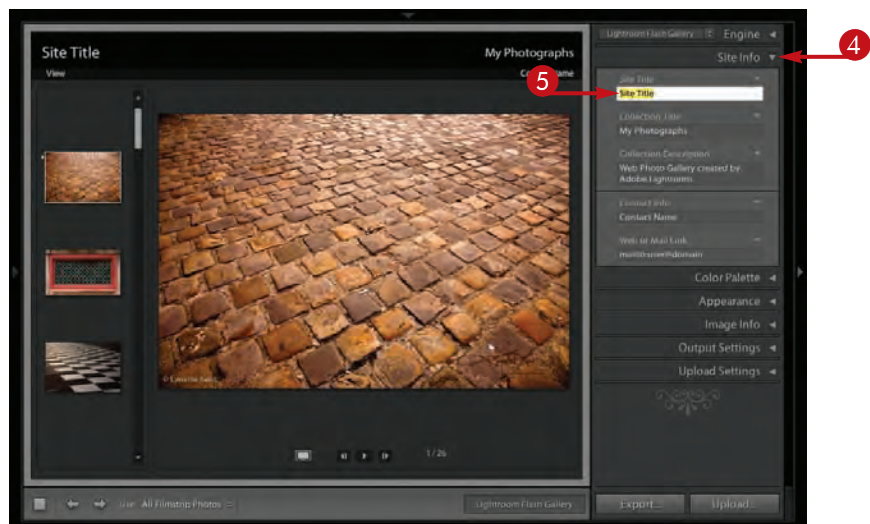
You can completely customize any basic Web gallery in Lightroom with a few simple clicks. Start by selecting a type of site, either Flash Gallery or HTML, and then selecting a template with a layout that appears close to your desired design. Use the right-panel tools to personalize the template for your Web gallery.

The example in this task shows the options for a Flash gallery. If you select an HTML gallery, some options in the right panel will be different.



Customize a Web Gallery Template

- 1 Follow the steps in the previous task to create a basic Web gallery.
- 2 Press **F7** to close the left panel.
- 3 Press **F** twice to clear the top panel.
- 4 Click the **Site Info** .
- The Site Info pane opens.
- 5 Click **Site Title**.
- The text appears highlighted.
- 6 Type a title for your custom site.
- 7 Press **Enter**.



- The new site title appears on the Gallery Preview.
- 8 Click **Collection Title**.
 - 9 Type a new title for the Collection.
 - 10 Repeat Steps 8 and 9 for each of the other Site Info fields.

Note: You can also click directly on any title in the Gallery Preview and type new information. Press **Return** (**Enter**) to apply it.

- 11 Click the **Color Palette** .



The Color Palette pane opens.

- 12 Click the **Header Text** color box.

The Lightroom Color Picker appears.

- 13 Click and drag in the slider.



The color field changes.

- 14 Click in the color field to select a Header Text color.

- Optionally, you can type RGB values by clicking the number by R, G, or B, and typing a new value. Press **Return** (**Enter**) to apply the color.

- 15 Click  to close the Color Picker.

- The header text is shown in the new color.




TIPS

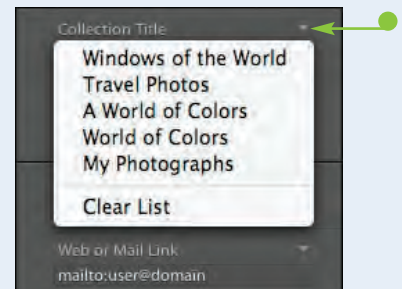
How is my e-mail shown on the final site?

The custom Web page displays either your e-mail address or a Web site address as an active link. Users can click your e-mail address on the Web page to automatically launch their default mail application and send you an e-mail, or they can click the Web site address to go directly to the site you list.



Why are there little triangles by each field?

Lightroom keeps a list of all the site field entries you have made. You can click these triangles () to open a menu and quickly select the text you applied to a previous Web gallery.





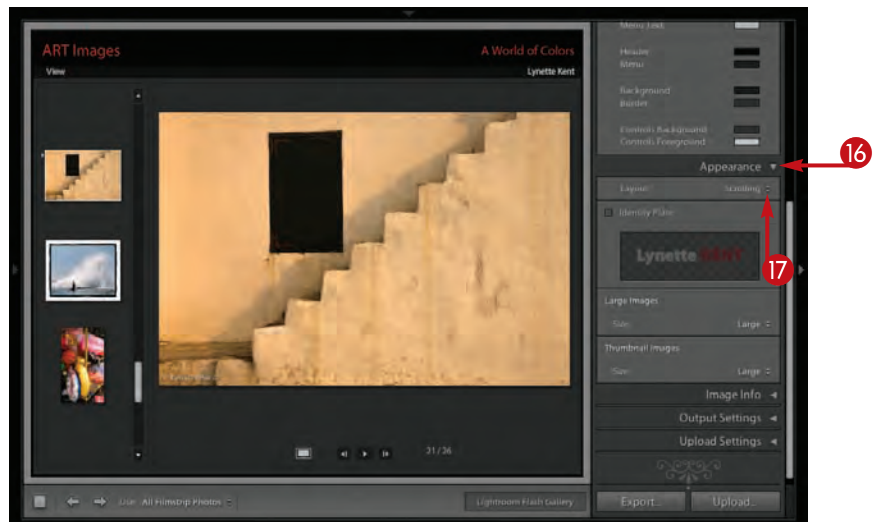
Customize a Web Gallery Template (continued)

The various site customization options, particularly in the Color Palette and the Appearance panes, are different for HTML and Flash Web Galleries. HTML Web Galleries include a grid of images and you can change borders, colors, and the number of images in the grid. Flash Galleries include scrolling, pagination, and slide show options. Other options appear the same for both styles.






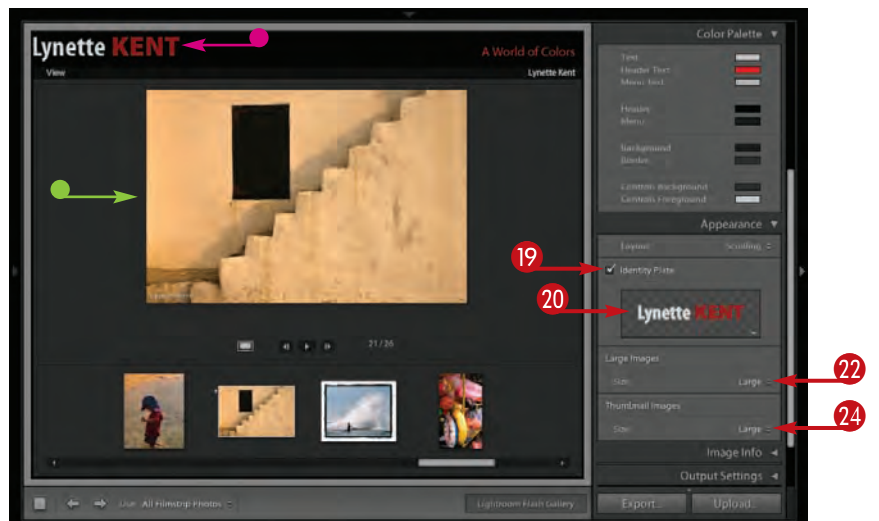
Customize a Web Gallery Template (continued)





- 16 Click the **Appearance** .
- 17 Click the **Layout** .
- 18 Click **Scrolling**.









- The Gallery Preview layout changes.

- 19 Click **Identity Plate**  changes to .
- 20 Click in the identity plate to open a menu of existing identity plates.
- 21 Click a different identity plate from the menu.
- The new identity plate appears.
- 22 Click the **Large Images Size** .
- 23 Click a different image size.
- 24 Repeat Steps 22 and 23 for the Thumbnail Images option.

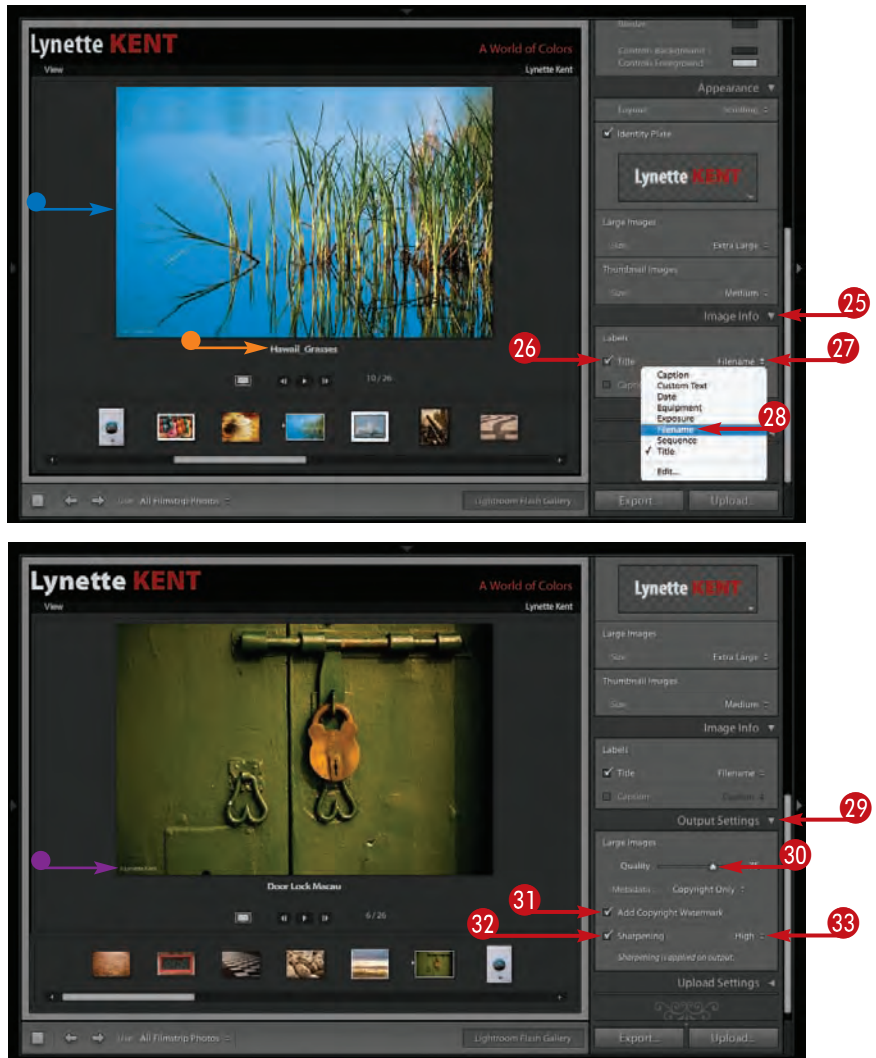


- The Gallery Preview changes accordingly.
- 25 Click the **Image Info** .
- 26 Click **Title** ( changes to .
- 27 Click the **Title** .
- 28 Click a different title to show such as **Filename**.
- The file name appears under the image in the Web gallery.

Note: Optionally, repeat Steps 26 to 28 for the Caption option.

- 29 Click the **Output Settings** .
- 30 Click and drag the Quality slider.
- 31 Click **Add Copyright Watermark** ( changes to .
- Your copyright appears on the large image.
- 32 Click **Sharpening** ( changes to .
- 33 Click the **Sharpening** .
- 34 Click a different amount of output sharpening.

Your changes to the Web gallery page automatically appear in the main gallery panel.



TIPS

Why should I use anything less than 100 percent Quality in the Output Settings?

The higher the quality, the larger the file size and the slower your images load on the viewer's screen. You can experiment with your own browser to judge the best output settings.



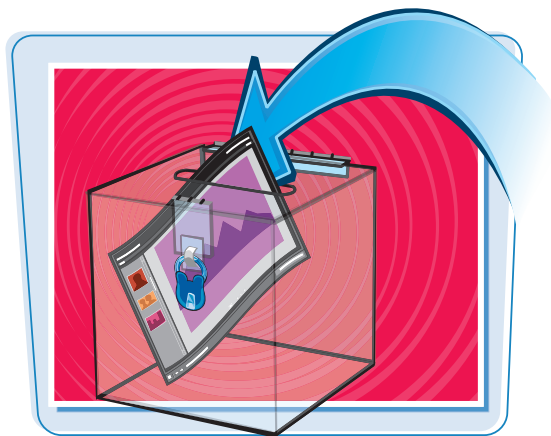
Why does my copyright not appear on the image when I click Add Copyright Watermark?

Lightroom displays the copyright from the metadata of the image. You should create a copyright in the Metadata panel of the Library module as in Chapter 4.




Managing Your Custom Web Gallery Templates

You should always save your custom Web gallery template immediately after creating it so you can reuse it for a different collection of images, or use it as a base for a different custom design. If you click another preset before saving your custom design, your customized layout is no longer available. When you no longer use a custom Web gallery template you created, you can easily delete it from the list.



Managing Your Custom Web Gallery Templates

SAVE AND PREVIEW A CUSTOM WEB GALLERY TEMPLATE

- 1 With your custom Web gallery design open, click the **Template Browser** .

The Template Browser pane opens.

- 2 Click the plus sign (+).

The New Template dialog box appears.

- 3 Type a name for your custom Web gallery design.

- 4 Click **Create**.

- The User Templates pane opens and lists your custom design.




- 5 Click **Preview in Browser**.

Your Web browser launches and displays a functioning version of your Web gallery.

- 6 Click any of the buttons or scroll bar to test the gallery.



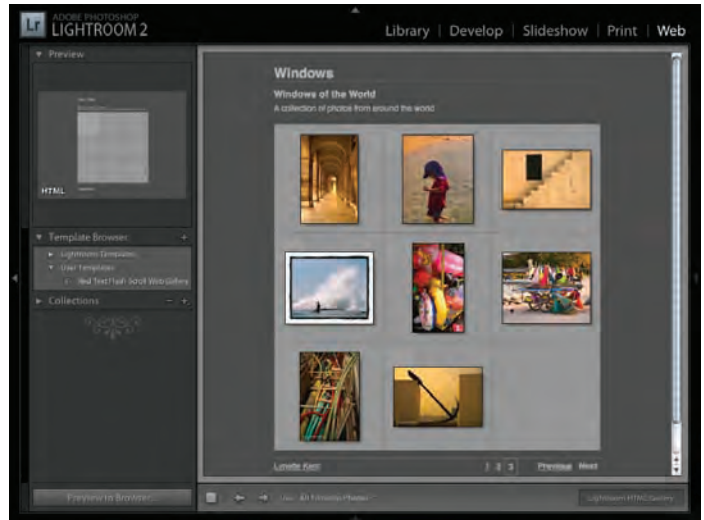
DELETE A CUSTOM WEB GALLERY TEMPLATE

- 1 Click the **Template Browser** .
The Template Browser pane opens.
- 2 Click the **User Templates** .
Your custom templates appear in a list.
- 3 Click the custom template you want to delete.
- 4 Click the minus sign .



The custom template listing is removed.

The custom template design remains in the Main Gallery preview; however, it is no longer saved.



TIPS

Can I delete the existing Lightroom Web templates?

No. You cannot delete these templates, so you always have a base design available to customize. Starting from one of Lightroom's layout templates makes creating a custom Web gallery much easier.



Are there other predefined Web Galleries available?

Yes. You can purchase and download custom Lightroom Web gallery designs from various vendors, such as SlideShowPro.net, and install the plug-in files according to their instructions.



Export Your Web Gallery

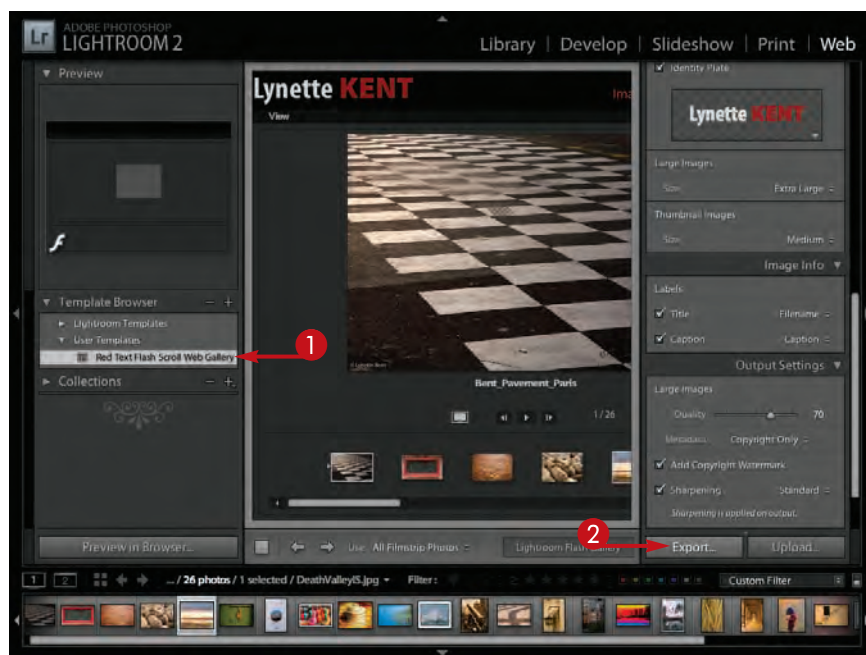
You can export any Web gallery you make and save a copy on your computer's hard drive. You can then view your Web gallery with clients or friends directly from the computer without an Internet connection. You can also burn the Web gallery files onto CD or DVD media for archiving and to share the Web gallery on another computer.



Export Your Web Gallery

EXPORT YOUR WEB GALLERY

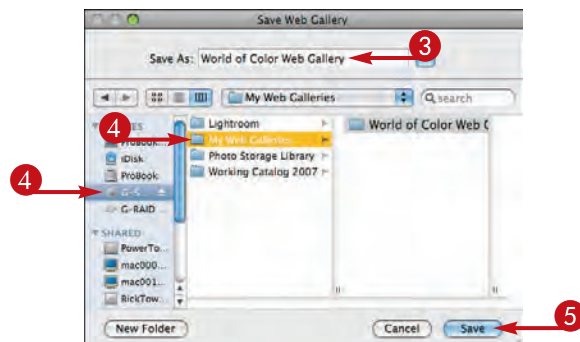
- 1 Click your custom Web gallery in the User Templates pane.
- 2 Click **Export**.



The Save Web Gallery dialog box appears.

- 3 Click in the Save As field and type a name for the Web gallery.
- 4 Navigate to and click a location to save the Gallery on a hard drive.
- 5 Click **Save**.

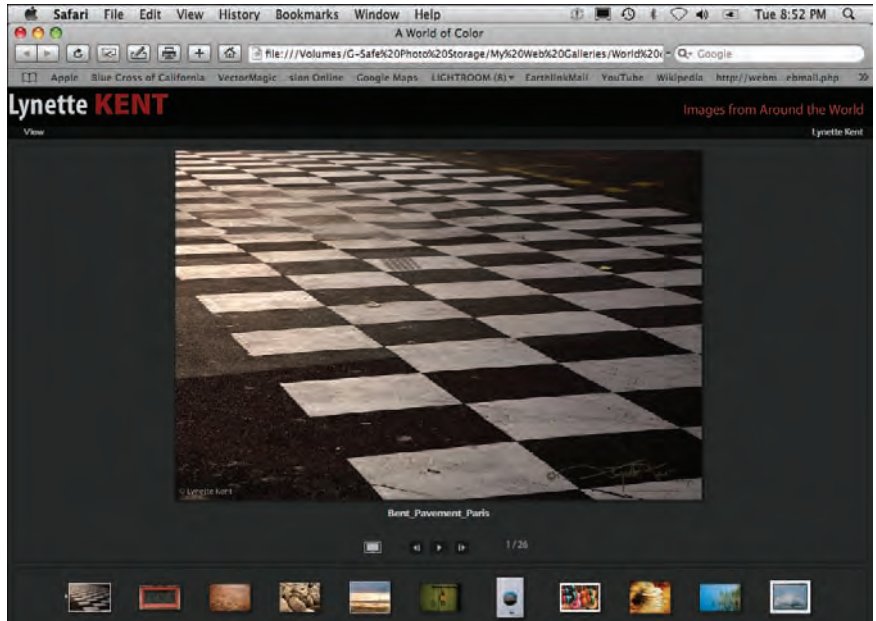
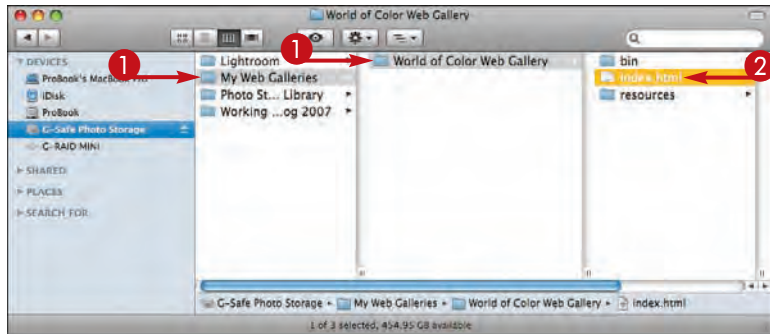
- Lightroom automatically creates a folder with the name of your Web gallery and creates the files necessary to open it in a Web browser.



TEST YOUR EXPORTED WEB GALLERY IN A BROWSER

- 1 Navigate to the location where you saved the Web gallery.
- 2 Double-click the index.html file.

Your Web browser launches and displays your Web gallery and photos.



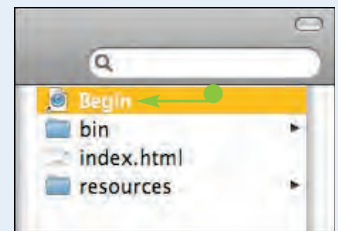
TIPS

Should I change the color space of the photos I am using for a Web gallery to sRGB in Lightroom's Preferences dialog box?

No. Lightroom's Web module automatically converts the image previews to sRGB as it builds the Web gallery. sRGB is the correct color space for Web output, where most of your viewers will be looking at your images with uncalibrated monitors. Lightroom's default color space is ProPhoto RGB, which is best for editing RAW photo files.

What files should I burn to CD or DVD media for sharing with friends or clients?

You should select the entire Web gallery folder that was created by Lightroom. You can, however, make it easier for your viewers to launch the site by first selecting and making an alias (shortcut) of the index.html file in the folder. Rename the alias *Begin* (●) or *Start Here*. Clicking this file launches the browser and Web gallery.



Upload Your Web Gallery to a Web Site

You can upload your exported Web gallery using various File Transfer Protocol (FTP) applications. However, you can upload the files directly from within the Web module and Lightroom uploads the files in the background so you can work on other images. Either way, you need specific information including the server URL, your User ID, and password.

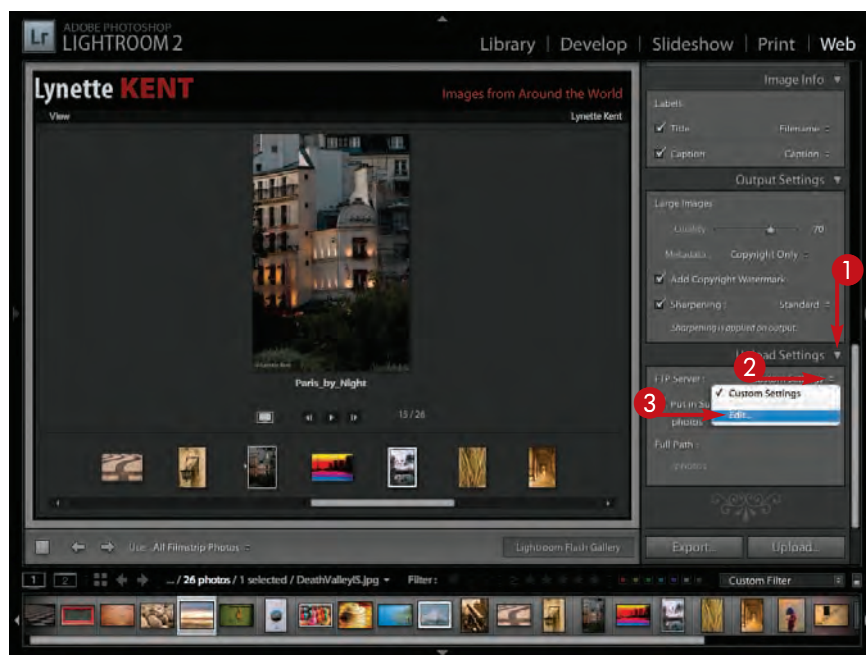


Upload Your Web Gallery to a Web Site

- 1 Click the **Upload Settings** button.

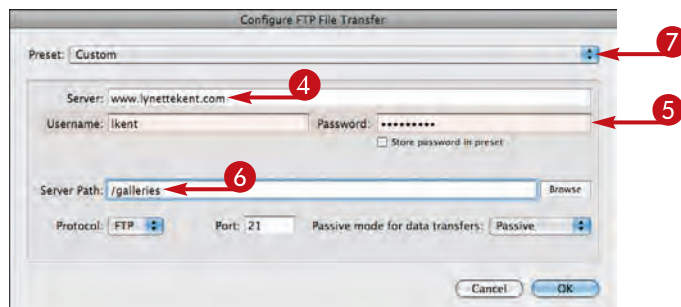
The Upload Settings pane expands.

- 2 Click the **FTP Server** button.
- 3 Click **Edit**.



The Configure FTP File Transfer dialog box appears.

- 4 Type your server name in the Server field.
- 5 Type your username and password in the appropriate fields.
- 6 Type the name of the folder location where you will upload the Web gallery folder.



Note: Optionally, click **Browse** to find the correct server path.

- 7 Click the **Preset** button.

8 Click **Save Current Settings as New Preset**.

The New Preset dialog box appears.

9 Type a name for the new preset for your FTP server.

10 Click **Create**.

11 Click **OK** in the Configure FTP File Transfer dialog box.

Your FTP server preset appears in the Upload Settings pane.

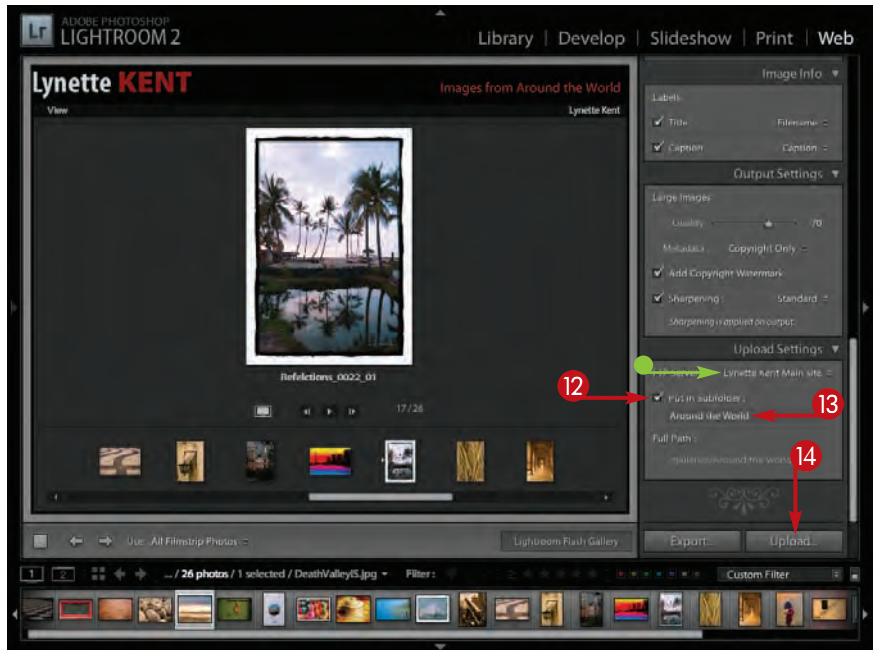
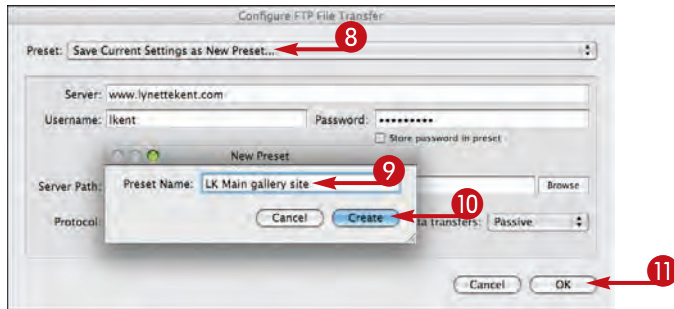
12 Click **Put in Subfolder** (☐ changes to ☑).

13 Type a name for this subfolder.

Note: The subfolder's name appears as part of the URL for your Web gallery so short, descriptive names can help with Web navigation.

14 Click **Upload**.

Lightroom automatically uploads the Web gallery to your Web site.



TIPS

Where can I find the information including the server name, my username, and the server path?

If your Internet account includes server space or if you pay a provider for site hosting, your Internet service provider will supply you with this information.



Should I click Store password in preset?

If you are the only person with access to the computer, you can store the password in the preset. Otherwise, anyone using your computer could upload altered items on your site without having to enter a password.



CHAPTER

12

Using Photoshop or Elements with Lightroom



Adobe designed Lightroom as a tool for the digital photographer. Lightroom is not a replacement for Photoshop, the professional image-editing application, nor the consumer version, Photoshop Elements. Instead, Lightroom combined with Photoshop CS3 or even Elements creates a more complete solution for creating digital photographic images.

Understanding the Differences between Lightroom and Bridge	292
Understanding the Differences between Lightroom and Photoshop or Elements	294
Set Lightroom's Preferences for the External Editors	296
Take a Raw or DNG File from Lightroom to Photoshop and Back.....	298
Take an Image from Lightroom to Photoshop or Elements and Back	300
Go from Lightroom to Photoshop to Create a Panorama.....	302

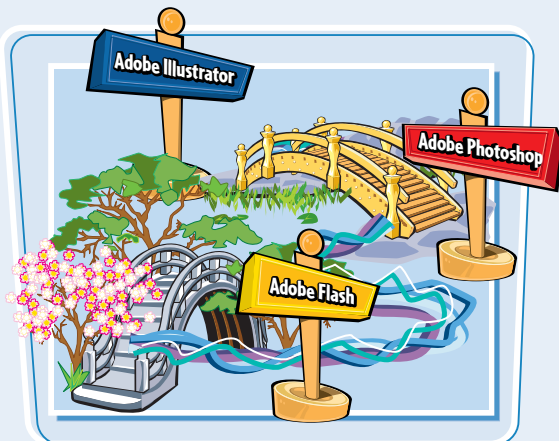
Understanding the Differences between Lightroom and Bridge

Adobe Lightroom and Adobe Bridge differ in the way they see and store data about images. Both are powerful image-viewing applications and both enable you to affect the files you see. You can use one or both depending on what you do with your files.



Bridge Connects Multiple Applications

Bridge helps photographers, fine artists, and all types of designers look through their files and use them with various applications. Bridge is the tool that connects all the applications in Adobe's Creative Suite.



Lightroom Guides Photographers

Lightroom is specifically geared to photographers to help them manage and process large numbers of images. Lightroom offers flexible file management and can be customized to fit the individual photographer's needs.



Bridge Is an Image Browser

Bridge is a very powerful image browser. By definition, an image browser enables you to see the digital photos on your main hard drive and any connected drives. In addition, Bridge also allows you to rename, convert file formats, and batch process your images.



Lightroom Functions as a Database

Lightroom can see farther than Bridge. Acting as a database, Lightroom lets you view, sort, organize, and apply settings to images on your connected drives as well as images stored on other currently disconnected drives.

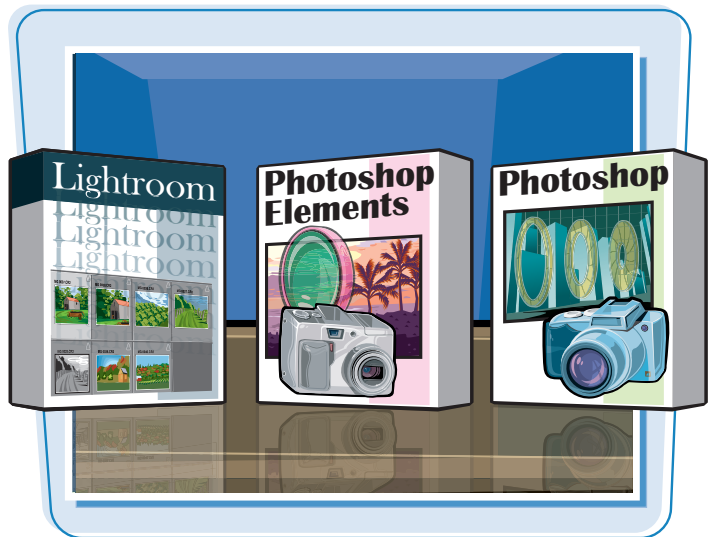
Advantages of Lightroom

Lightroom is perfect for the traveling photographer. Once you import photos into a Lightroom catalog on your laptop, you can use the computer without the storage drives and still sort, organize, develop, and adjust your images. Because Lightroom is database driven, it accesses metadata more quickly, making searches faster. Lightroom also stores data for virtual copies, collections, and various template designs, making everything you do with your photos faster and easier.



Understanding the Differences between Lightroom and Photoshop or Elements

Photoshop has been the standard for image editing since it first appeared in early 1990. Elements was introduced as a consumer version of Photoshop in 2001. Lightroom offers a digital darkroom for all types of photographers, providing traditional photographic tools within a digital application.

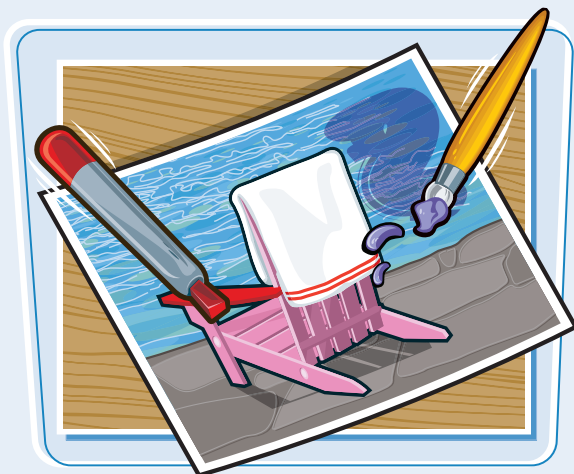


Individual Photo Editors

Photoshop and Elements are pixel-level editors. You use them to work on one image at a time, adjusting the color, tone, and the pixels that make up the image. Both are also excellent for creating composites or blending of multiple photos into one creation.

Volume Photo Organization and Enhancement

With Lightroom, you can manage large numbers of photos at one time. You can easily apply the same edits such as white balance, tonal corrections, or black-and-white conversions, across a number of images, as well as add metadata such as copyright and keywords. Finally, Lightroom helps you show and share your images through slide shows, print, and the Web.



Permanent Pixel-Based Editing

Photoshop and Elements both change the pixels in the image. Once the image is saved, the changes are permanent. To create several versions of an image, such as a photo in original color, grayscale, and split tone, you must create three separate files.



Nondestructive Editing

Lightroom adds edits to the data, or the information describing the photo. Lightroom never changes the actual pixels in the image, and the original file can be viewed any time. You can create virtual copies to view any number of renditions of the same original without increasing the actual number of images or the storage requirements for the photo.

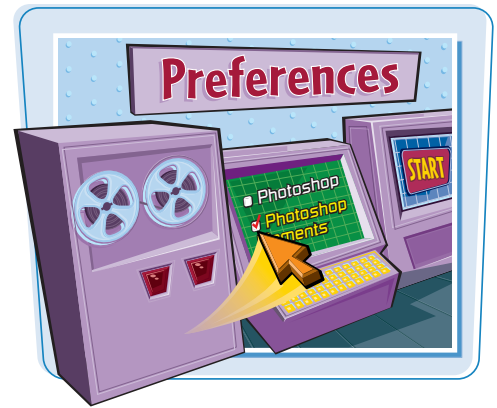
Lightroom Works with Photoshop or Elements

Lightroom enables you to seamlessly send any photo to Photoshop or Elements for editing, and then return the final image to the Lightroom catalog. Although Photoshop has many more options for enhancing photos than Elements, you can use either application to retouch individual photos, remove parts of images, and merge or combine images into one creation.



Set Lightroom's Preferences for the External Editors

You can specify the external photo-editing application you want to use with Lightroom in the preferences. Lightroom automatically recognizes the version of Photoshop on your system, and you can set both a first and a second image editor in the dialog box.



Set Lightroom's Preferences for the External Editors


SET THE MAIN EXTERNAL EDITING APPLICATION

- 1 Click **Lightroom** (click **Edit**).
- 2 Click **Preferences**.

The Preferences dialog box appears.

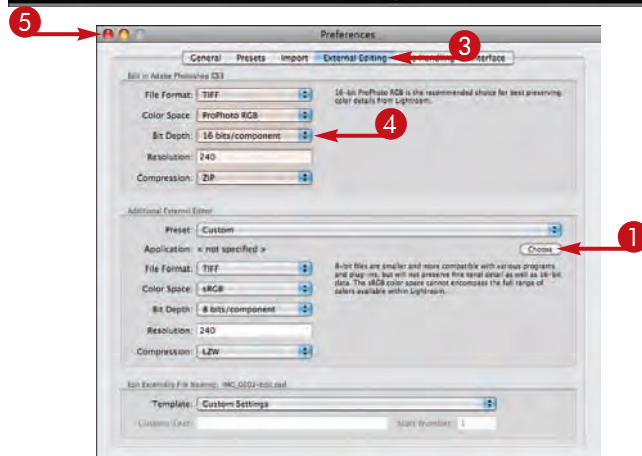
- 3 Click the **External Editing** tab.

Note: If Photoshop is installed on your computer, it appears as the default external editor.

- 4 Click any of the arrows (↕) to change the default options.
- 5 Click  to close and save the preferences.

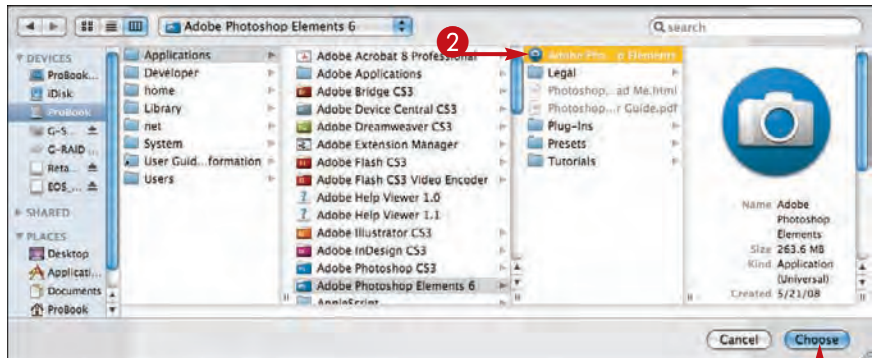
SET THE SECONDARY EXTERNAL EDITING APPLICATION

- 1 Click **Choose**.




The Applications folder appears.

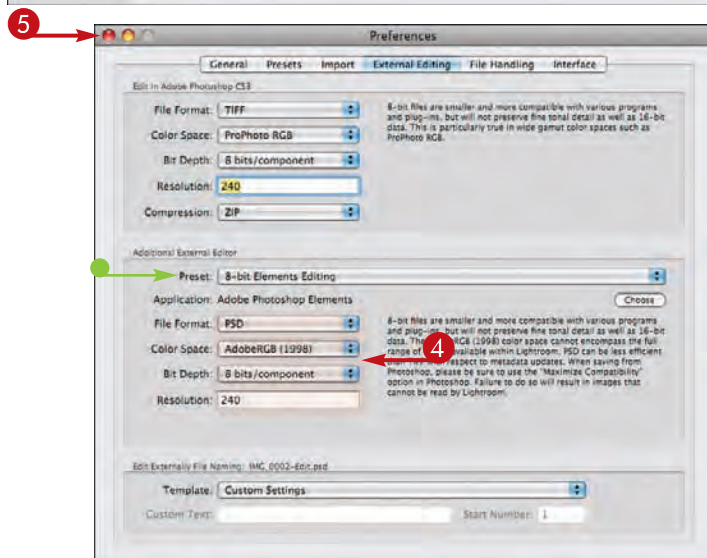
- 2 Navigate to another image editor.
- 3 Click **Choose**.



- The second editor application appears as the Additional External Editor.

Note: You can select the same editor again with different options and save it as a special Preset. For example, you may want to edit strictly for e-mail or Internet viewing in sRGB color space and at a lower resolution.

- 4 Click any of the arrows (↕) to change the options.
- 5 Click  to close and save the preferences.



TIPS

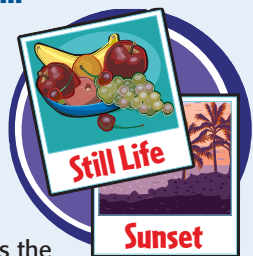
How do I determine which color space settings to select?

The settings depend on your external editor and what you will do with the edited photo. Adobe includes a descriptive paragraph with each selection in the dialog box to help you. The ProPhoto color space and 16 bit gives you the greatest color range and tonal details to work with in Photoshop.



Should I create a custom naming template for external editing?

Not necessarily. If you rename your photos on import or once they are in a catalog, you can leave this part of the dialog box blank. The file names remain the same as the original with "-Edit" added so you can more easily identify the edited image with the originals.



Take a Raw or DNG File from Lightroom to Photoshop and Back

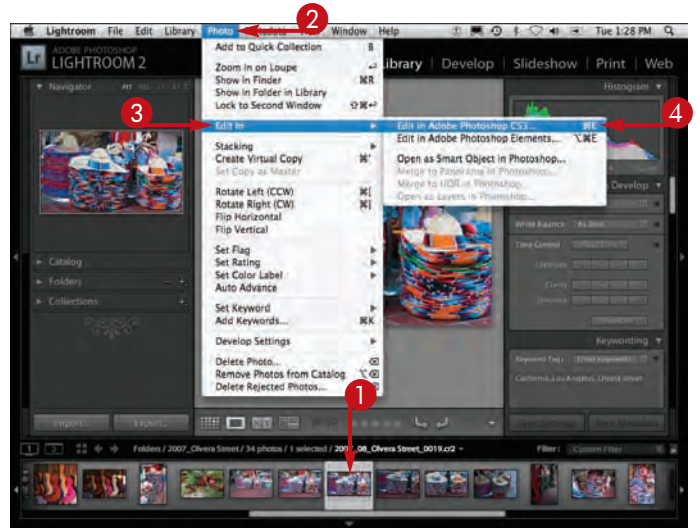
You can take any Raw or DNG photo from Lightroom to Photoshop and continue editing. You can apply any changes to the photo such as filters or cloning. When you save the file, the edited photo automatically appears in the Lightroom grid next to the original.



Take a Raw or DNG File from Lightroom to Photoshop and Back

- 1 Click a photo in either the Library or the Develop module.
- 2 Click **Photo**.
- 3 Click **Edit In**.
- 4 Click **Edit in Adobe Photoshop CS3**.

Note: Lightroom recognizes the latest version of Photoshop CS on your system.



Photoshop launches and the photo appears in the active window.

Note: The effect in this task is only an example. You can use any Photoshop tools, effects, or filters, as well as the Type tool.

- 5 Click **⌘+Control+H** () to hide Lightroom.
- 6 Click the **Type** tool (T).
- 7 Click a font, size, and color in the options bar.
- 8 Click in the photo and type the text.

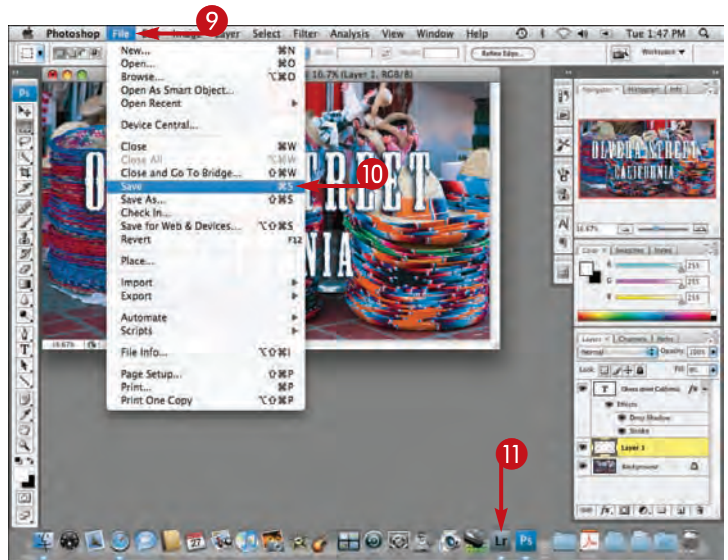
Note: Optionally, add any layer styles to the text.



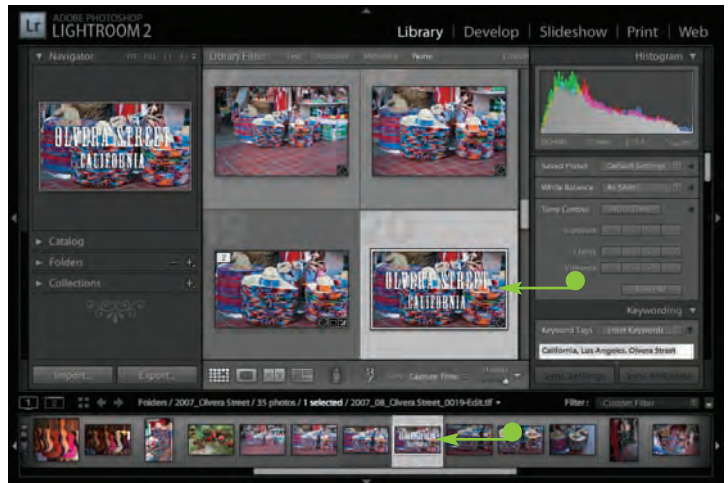
- 9 Click **File**.
- 10 Click **Save**.
- 11 Switch back to Lightroom.

On a Mac, click the Lightroom icon in the Dock to bring Lightroom back.

On a PC, click Lightroom in the taskbar.



- The edited file appears next to the original in the Library grid and the Filmstrip.



TIPS

Where is the file saved when I open the photo in Photoshop and save it after making changes?

When you edit a photo with Photoshop and save it, the changes are applied, a new file is created, and the photo is automatically imported into the Lightroom catalog. The new file is placed in the same location as the original on the storage drive.



Can I rename the edited file in Photoshop?

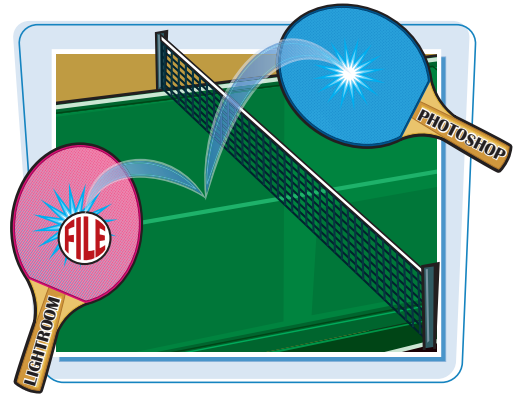
Yes, you can rename the file by clicking **Save As**. However, when you save the file with a new name, Lightroom does not automatically import it for you. You have to click **Import** and select the file to add this edited file to your catalog.



Take an Image from Lightroom to Photoshop or Elements and Back

You can take any image from Lightroom and go directly to Photoshop or Elements to edit or make a Photoshop Elements creation. If the file is a PSD, TIFF, or JPEG, you can edit the original file, edit a copy with no Lightroom adjustments, or edit a copy with the Lightroom adjustments visible.

Photoshop Elements Creations include easy steps for designing photo books, photo calendars, and photo collages.



Take an Image from Lightroom to Photoshop or Elements and Back

- 1 Click a photo in either the Library or the Develop module.
- 2 Click **Photo**.
- 3 Click **Edit In**.
- 4 Click **Edit in Adobe Photoshop Elements**.

The Edit Photo with Adobe Photoshop Elements dialog box appears.

Note: In Photoshop, the Edit Photo in Photoshop CS3 (or the installed version of Photoshop CS) dialog box appears.

- 5 Click **Edit a Copy with Lightroom Adjustments** (● changes to ●).

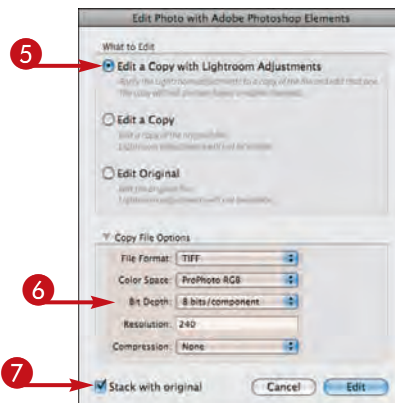
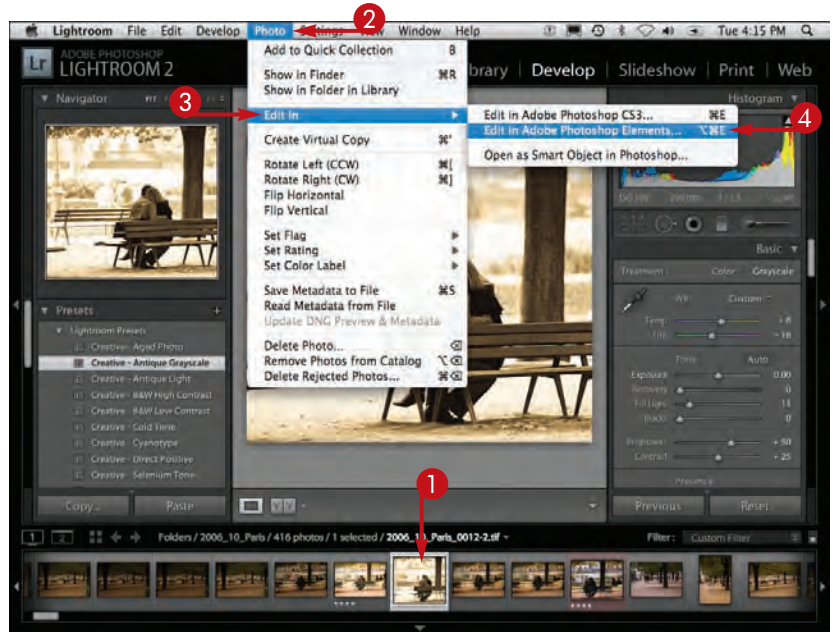
The Copy File Options are now available.

- 6 Make any changes to the file options depending on what you plan to do with the file.

Note: Some filters, particularly in Elements, cannot be applied to 16-bit images.

- 7 Click **Stack with original** (☐ changes to ☑).

Note: Stack with original makes the externally edited copy appear in Lightroom's Filmstrip and Grid grouped with the original photo, making your catalog organized and the images easy to compare.



- Elements launches and the photo appears in the active window.

8 Click **Edit**.

9 Click **Effects**.

10 Double-click an effect, such as **Colored Pencil**.

Make any changes in the Colored Pencil dialog box that appears and click **OK** to apply it.

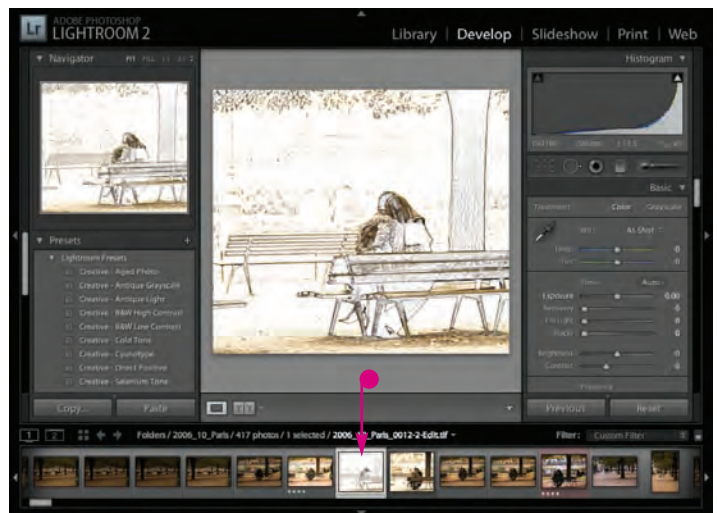
Note: You can also click **Create** in Elements to make a creation or select any tools in Photoshop or Elements to apply them.

11 Press **⌘+S** (**Ctrl+S**) to save.

The edited copy is saved to the same location as the original.

12 Press **⌘+Control+H** (**⇧+H**) to hide Elements.

- The edited file appears next to the original in the Library grid and the Filmstrip.



TIPS

What happens is if I make a photo collage in Elements with the photo from Lightroom?

Unlike a photo, which you can edit in Elements and click **Save** to have the edited photo appear in Lightroom, you must click **Save As** for a photo collage or any other Elements creation and give the creation a new name. You must also import the creation into Lightroom to have Lightroom manage it in the catalog.



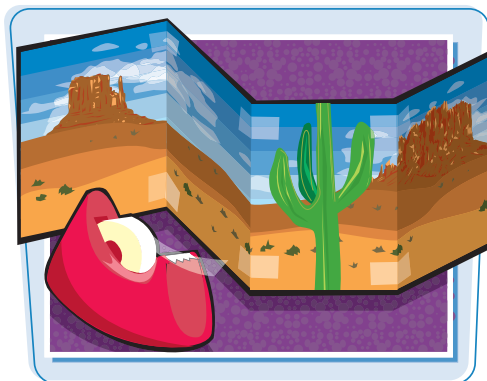
What are the differences between the What to Edit options in the Edit Photo dialog box?

Click **Edit a Copy with Lightroom Adjustments** to further edit a photo in Photoshop or Elements with the Lightroom adjustments visible in the external editor. Click **Edit a Copy** to create and edit a separate copy of the original file without any Lightroom adjustments applied. Click **Edit Original** to directly edit the original file in Photoshop or Elements, without any Lightroom adjustments applied and without adding a separate file to the Lightroom catalog and photo storage.

Go from Lightroom to Photoshop to Create a Panorama

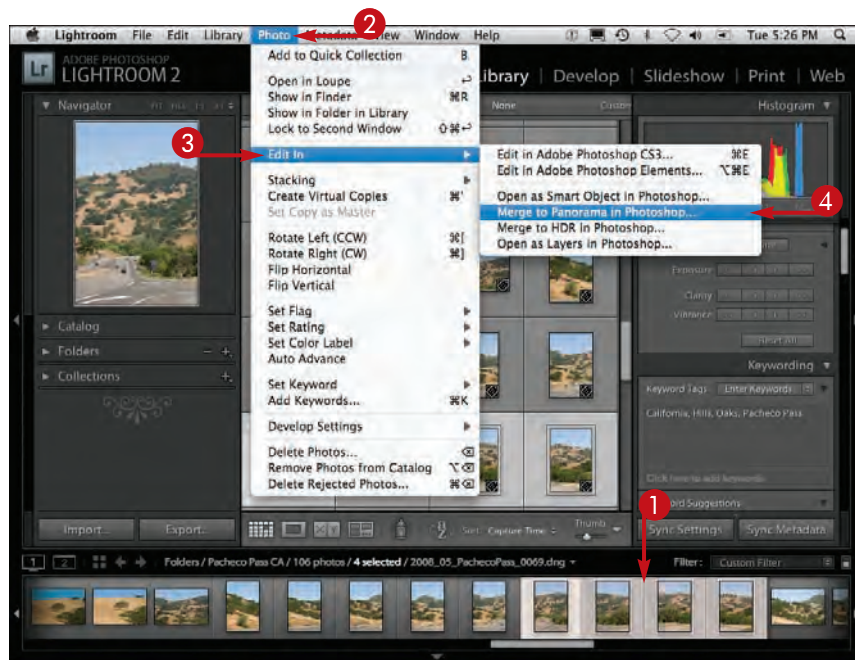
You can easily create a panorama from multiple photos using Photoshop CS3. You can preview and select the images to use in Lightroom and then send them directly to Photoshop. The panorama is automatically saved back to the Lightroom catalog.

Shooting the individual photos in portrait orientation and using a tripod to level the horizon makes creating panoramas much easier.



Go from Lightroom to Photoshop to Create a Panorama

- 1 Shift+click a series of photos in the Grid of the Library module.
- 2 Click **Photo**.
- 3 Click **Edit in**.
- 4 Click **Merge to Panorama in Photoshop**.

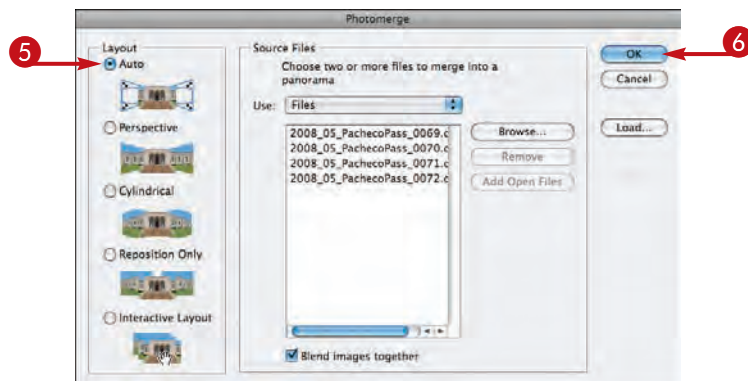


Photoshop launches and the Photomerge dialog box appears with the selected files listed.

- 5 Click **Auto** (● changes to ●).

Note: Click any of the other layout options depending on your images.

- 6 Click **OK**.

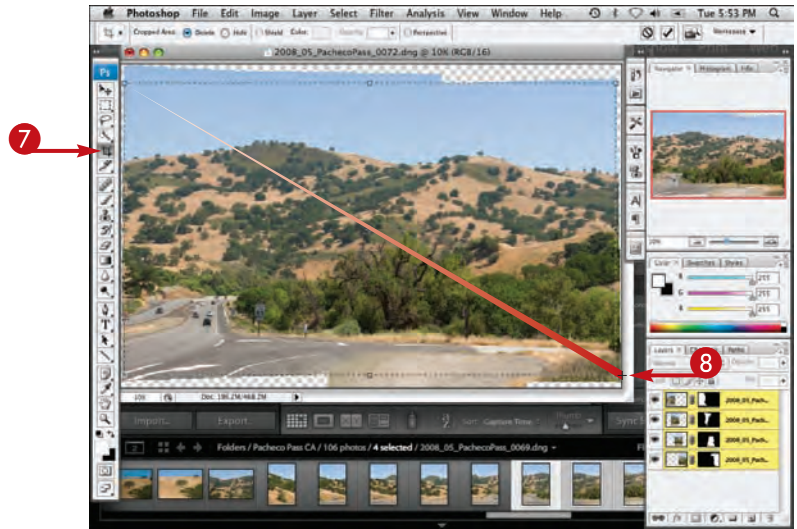


Photoshop merges the files, aligning and blending the layers.

Note: Optionally, make any adjustments to the panorama using Photoshop tools.

- 7 Click the **Crop** tool ().
- 8 Click and drag in the image to eliminate blank edges.
- 9 Press **Return** (**Enter**) to apply the crop.
- 10 Press **⌘+S** (**Ctrl+S**) to save the panorama file.
- 11 Press **⌘+Control+H** () to hide Photoshop.

- The panorama file appears next to the original files used in the merge in the Library Filmstrip.



TIPS

Can I use Merge to HDR in Photoshop the same way to create a High Dynamic Range photo?

Yes. **Shift**+click to select a series of photos taken at different exposures. Then click **Photo**, click **Edit In**, and click **Merge to HDR in Photoshop** to automatically open the selected images in Photoshop with the Merge to HDR command activated. With Merge to HDR, you can create a separate image with a broader range of tones than the camera could capture in one photo.

What are Open as Smart Object in Photoshop and Open as Layers in Photoshop used for?

When you open a Lightroom file as a Smart Object, you can transform or add styles and still edit the Camera Raw settings, giving you more flexibility with your enhancements. Opening multiple photos as layers in photos enables you to use the Auto Align feature in Photoshop to easily create the best composite of a group of photos.

CHAPTER

13

Exporting Photos for Multiple Uses



Lightroom never actually changes the pixels in your photos. Instead, it writes a set of instructions in the data corresponding to the enhancements you make to the photo as it appears on your monitor. If you want to use the photo file with a different application or on another computer, you need to export the edited image and make sure the changes you made in Lightroom are still visible when you open the image with another photo editor.



Understanding the Lightroom	
Export Feature	306
Explore the Export Dialog Box Settings.....	308
Create an Export Preset to Attach	
Photos to Your E-mail	310

Understanding the Lightroom Export Feature

Lightroom's Export function is similar to the Save As function in other applications in that you select different options depending on what you intend to do with the exported photos. The Library module includes a general Export button; however, you can export from any module using keyboard shortcuts or the File menu. You can also use the Export buttons in the Slideshow and Web modules for specific export tasks.

You can export one image at a time, export a group of photos, or even export a complete catalog.



EXPORT FROM ANY MODULE

● Export

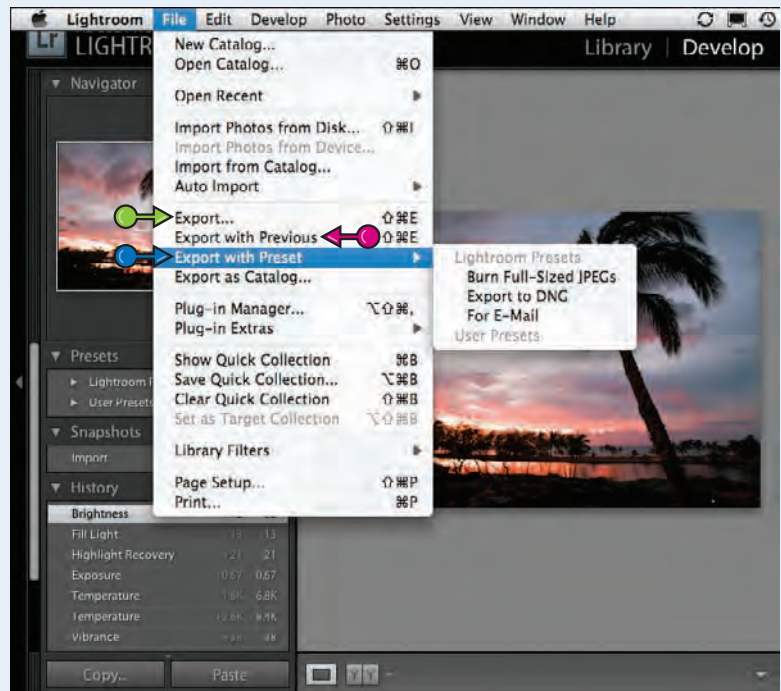
You can click **Export** from the File menu to open the Export dialog box, where you select settings, such as destination folder and file names, for the exported files. You can also press **⌘+Shift+E** (**Ctrl+Shift+E**) to open the Export dialog box.

● Export with Previous

You can click **Export with Previous** from the File menu to export one or multiple images and bypass the Export dialog box. The photos are exported with the existing settings in the export dialog box. You can also press **⌘+Option+Shift+E** (**Ctrl+Alt+Shift+E**) to export with previous settings.

● Export with Preset

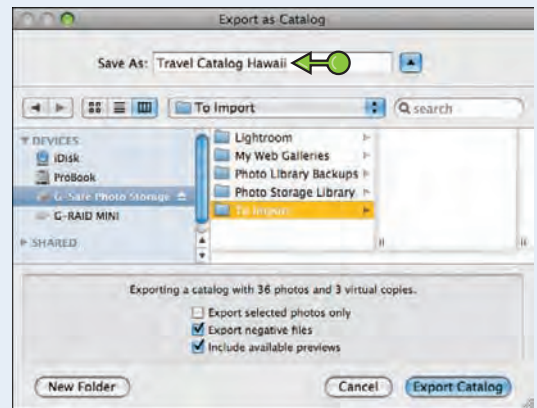
Clicking **Export with Preset** under the File menu also bypasses the Export dialog box and automatically exports the photos using specific settings, including Burn Full-Sized JPEGs, Export to DNG, or For E-Mail. You can also select any custom export presets, or Photoshop action droplets you placed into the Export Actions folder.



EXPORT FROM ANY MODULE (CONTINUED)

● **Export as Catalog**

Clicking **Export as Catalog** under the File menu exports the Lightroom catalog, complete with the previews and the original photo files, called *digital negatives*, to a new location. For example, you can export a catalog from a travel laptop after a trip and save it to an external drive. You can then import the travel catalog and synchronize it with the catalog on your main computer.



EXPORT USING THE MODULE-SPECIFIC EXPORT BUTTONS

● **Use the Library Module Export Button**

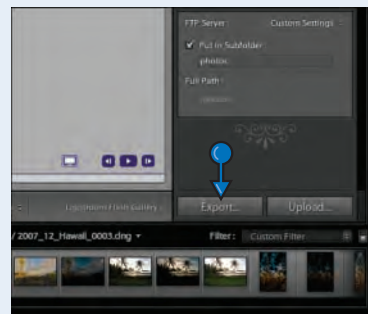
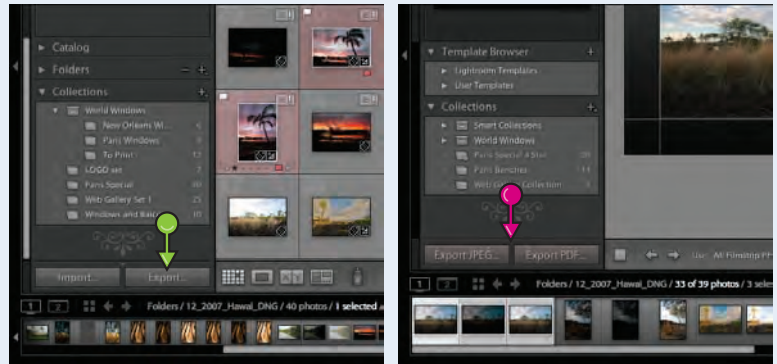
The Library module includes an export button in the left panel to export one or multiple selected photos. Click the **Export** button to open the Export dialog box.

● **Use the Slideshow Export Buttons**

The Slideshow module includes export buttons to save the slideshow as either individual JPEGs or as a complete PDF.

● **Use the Web Module Export Button**

The Web module includes an export button to save a completed Web Gallery in a new folder.



Explore the Export Dialog Box Settings

Lightroom's Export dialog box is the key to automating your photo projects. Because Lightroom does not save photos with your edits, you must export them to attach to e-mail or write to other media. You can set the Export dialog box options, and then all the files you select and export using Export with Previous are exported with those same settings.



Explore the Export Dialog Box Settings

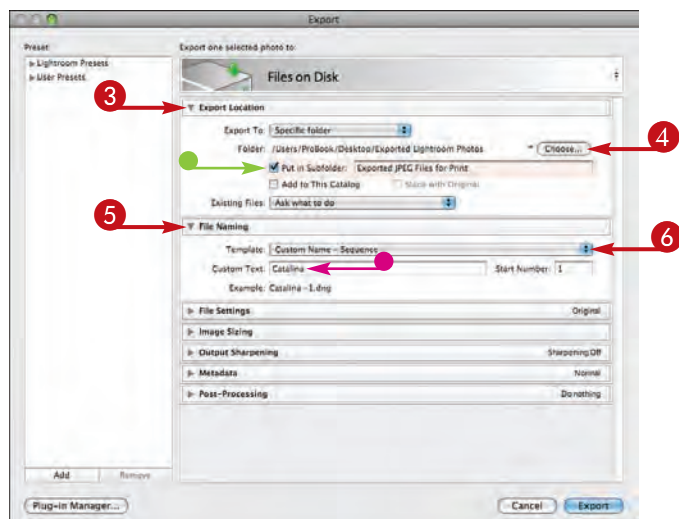
Note: The settings in this task are for exporting images to a folder of JPEGs sized to print on a consumer-level inkjet printer.

- 1 With one or more files selected in the Filmstrip, click **File**.
- 2 Click **Export**.



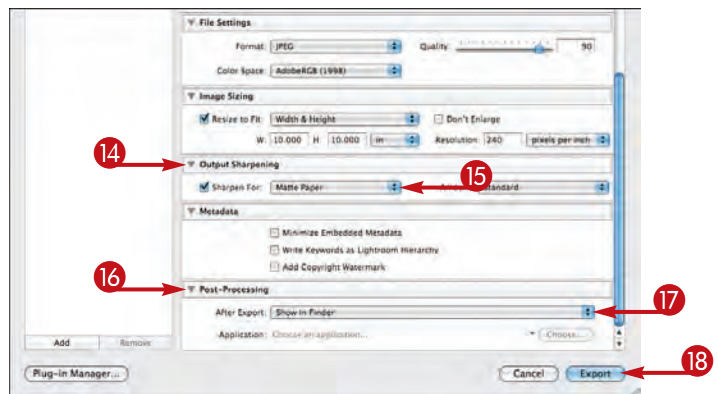
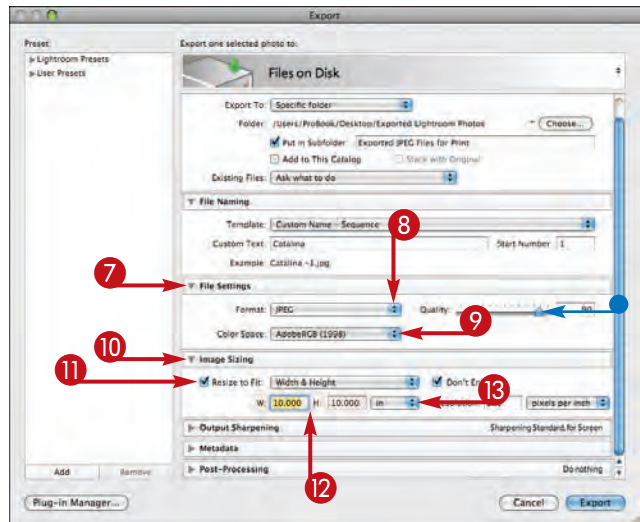
The Export dialog box appears.

- 3 Click the **Export Location** button.
- 4 Click **Choose** and navigate to a location to save your exported files.
- 5 You can click **Put in Subfolder** (☐ changes to ☑) and type a name in the text box.
- 6 Click the **File Naming** button.
- 7 Click the **Template** button and click a template.
- 8 If you select Custom Text, click in the Custom Text box and type a name for the files.



- 7 Click the **File Settings** ▢.
- 8 Click the **Format** ▢ and click **JPEG**.
- 9 Click the **Color Space** ▢ and click **AdobeRGB (1998)**.
 - Optional: Click and drag the **Quality** slider.
- 10 Click the **Image Sizing** ▢.
- 11 Click **Resize to Fit** (☐ changes to ☑).
- 12 Type **10** in each box.
- 13 Click the ▢ and click **in**.
- 14 Click the **Output Sharpening** ▢.
- 15 Click the **Sharpen For** ▢ and click a paper type, such as **Matte Paper** or **Glossy Paper**.
- 16 Click the **Post-Processing** ▢.
- 17 Click the **After Export** ▢ and click **Show in Finder**.
- 18 Click **Export**.

Lightroom displays a progress bar in the upper left corner and opens the Finder (Windows Explorer) showing the folder with the exported image.



TIPS

Are there keyboard shortcuts to using the Export commands?

Yes, but only for the Export and Export with Previous commands. You can open the Export dialog box by pressing **⌘+Shift+E** (**Ctrl+Shift+E**) with or without a photo selected. To use the Export with Previous command, **⌘+Shift+Option+E** (**Ctrl+Shift+Alt+E**), you must first select one or more photos.

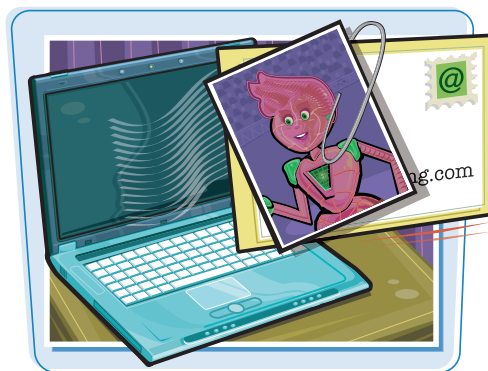
Why should I put 10 in both the width and height for 8 by 10 photos?

Lightroom sizes the photos according to their current aspect ratio. If you type **10** in both the width and height, a landscape (horizontal) photo is sized to 10 inches wide, and a portrait (vertical) photo is sized to 10 inches high for exporting. When you click **Don't Enlarge** (☐ changes to ☑) in the Image Sizing section, Lightroom also limits the size to the maximum pixel dimensions of the original file. It will not *interpolate* or make up pixels to increase the size of the exported photo.



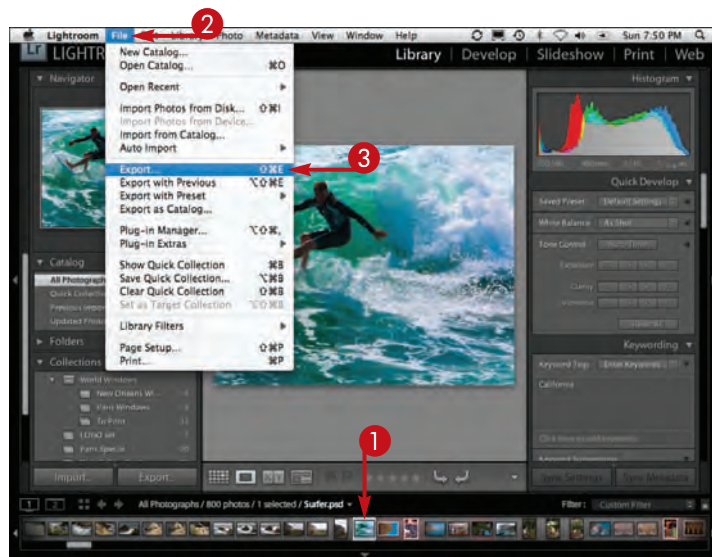
Create an Export Preset to Attach Photos to Your E-mail

You can create a custom Export preset to automatically launch your particular e-mail application and attach selected photos, resized and saved as JPEGs with the optimum settings for e-mail attachments. You can create as many presets as you want for various exporting projects to make all your exporting tasks seamless.



Create an Export Preset to Attach Photos to Your E-mail

- 1 In any module, click a photo in the Filmstrip to select it.
- 2 Click **File**.
- 3 Click **Export**.



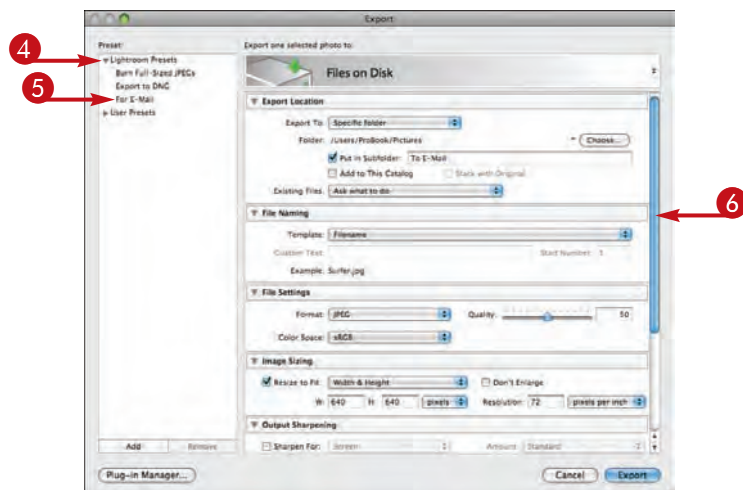
The Export dialog box appears.

- 4 Click the **Lightroom Presets** button.
- 5 Click **For E-Mail**.

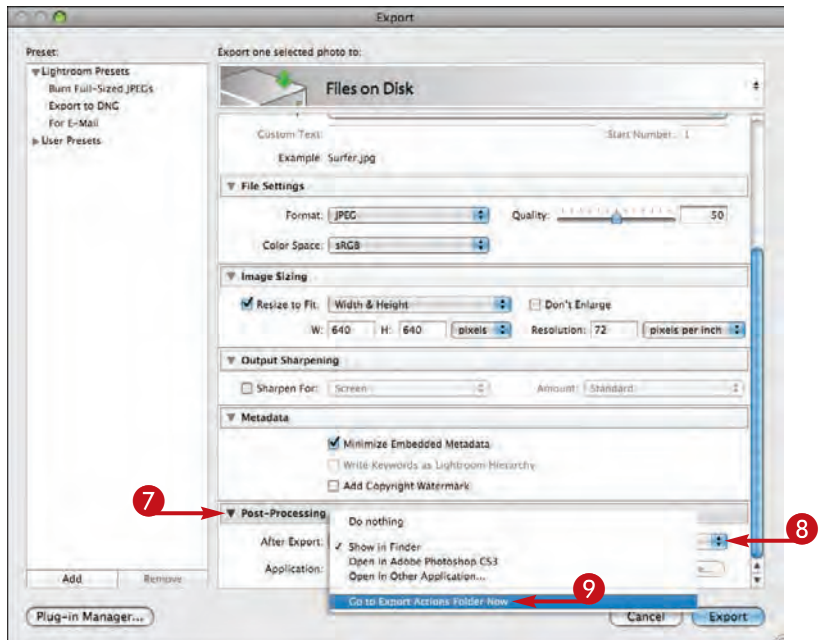
The settings in the dialog box change to the optimum settings for attaching a photo to an e-mail.

Note: You can change any of these settings to fit the type of file you want to send.

- 6 Click and drag the scroll bar to view the Post-Processing settings.

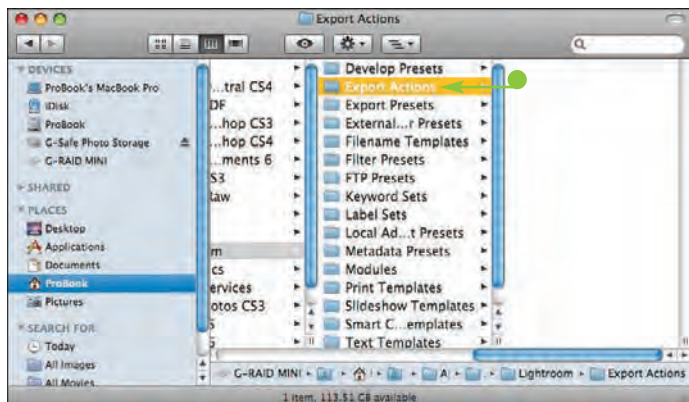


- 7 Click the **Post-Processing** button to open the options.
- 8 Click the **After Export** button.
- 9 Click **Go to Export Actions Folder Now**.



- A Finder window opens with the Export Actions folder highlighted.

Note: For Steps 10 to 14 on a PC, **Ctrl**+**Alt**+click and drag the icon for your e-mail application from the Program Files folder to the Lightroom Export Actions folder to create a shortcut.



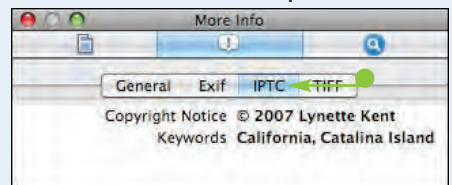
TIPS

What does the Plug-in Manager button do?

Clicking the button opens the Lightroom Plug-in Manager dialog box listing any plug-ins you have installed. You can also click the **Plug-in Exchange** button to search for any third-party Lightroom plug-ins.

Does Add Copyright Watermark put my copyright on the front of the image to print?

No. Clicking **Add Copyright Watermark** (checkbox changes to ☒) includes a copyright in the metadata that accompanies the exported file (●), but only if you previously put one into the Metadata section in the Library module. See Chapter 4 for more about metadata.



Create an Export Preset to Attach Photos to Your E-mail (continued)

You can also start with one of Lightroom's export presets and modify the options to fit your projects. Be sure to click Add in the Export dialog box and save the customized preset with a new name so your individual settings are saved for future exports.

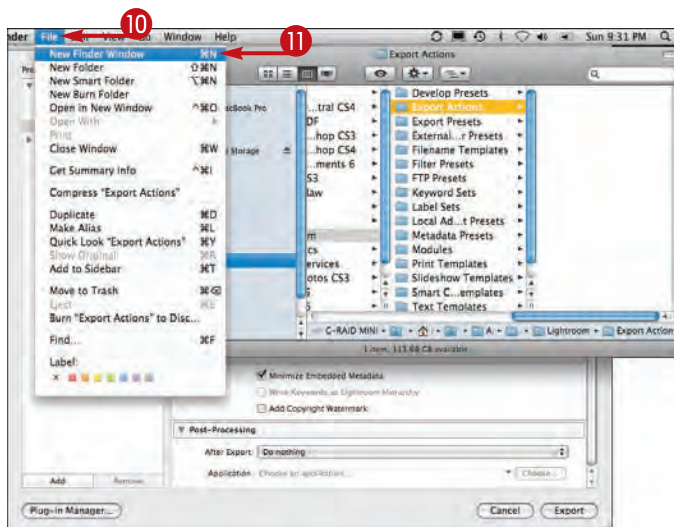


Create an Export Preset to Attach Photos to Your E-mail (continued)

10 Click **File**.

11 Click **New Finder Window**.

Note: You can also **Control**+click the Mail application in the Dock, and select **Show in Finder**.




A second finder window appears.

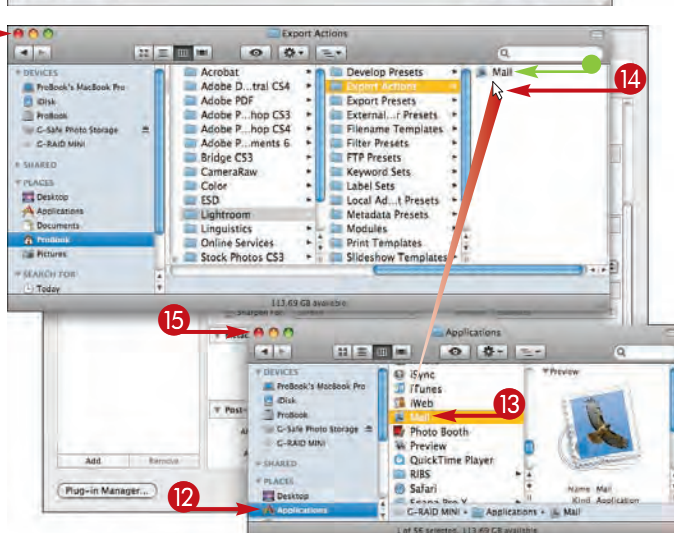
12 Click **Applications**.

13 Click **Mail** or your Mail application.

14 Press **⌘**+**Option** and click and drag the Mail application icon into the Export Actions folder.

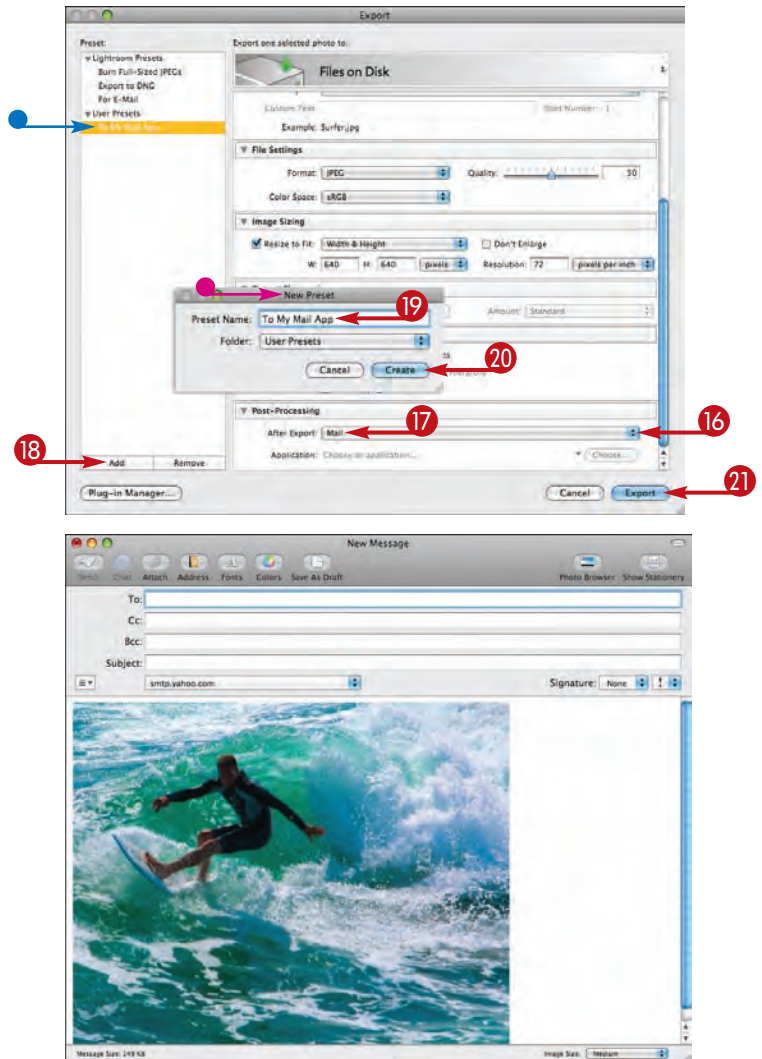
● An alias for your Mail application appears in the Export Actions folder.

15 Click  to close each Finder window.



- 16 Click the **After Export** ▾.
- 17 Click **Mail** or your e-mail application.
- 18 Click **Add**.
 - A New Preset dialog box appears.
- 19 Click in the Preset Name box and type a name for the preset.
- 20 Click **Create**.
 - The new preset is listed and is saved as a user preset.
- 21 Click **Export**.

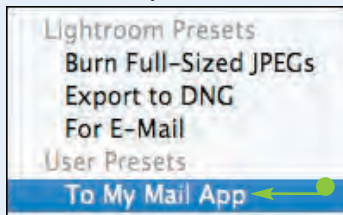
Your e-mail application launches and opens a new e-mail with the file as an attachment.



TIPS

Is the preset still saved if I click Cancel?

Yes. You can click **Cancel** instead of **Export** to return to the Lightroom interface. When you next click **File** and then **Export with Preset** in the menu, your custom e-mail preset (●) appears as a selection in the menu.



Can Lightroom run a Photoshop action?

Yes, indirectly. In Photoshop you can create a *droplet* of an action by clicking the **File** menu, clicking **Automate** and then **Create Droplet**. Then in Lightroom, open the Preferences dialog box and click the **Presets** tab. Click **Show Lightroom Presets Folder** and locate the **Export Actions** folder. Click and drag the action droplet you created into the Export Actions folder. The next time you click **Export with Preset**, your action droplet appears in the menu.

CHAPTER

14

Best Practices for Memory Cards and Storage



From the moment you click the shutter through the final print or display, your photos reside on memory cards and computer hard drives. Understanding the different options and how best to use these devices to avoid potential problems is as important as knowing how to use your camera.

Understanding Memory Cards and Memory Card Readers	316
Using Memory Cards Correctly.....	318
Differentiating between Storage, Backups, and Archives.....	320
Understanding External Hard Drives	322
Defining Multidrive and RAID Systems	324
Protecting Your Hard Drives	325
Understanding Travel Essentials with a Digital Camera	326
Using an Online Storage System	328

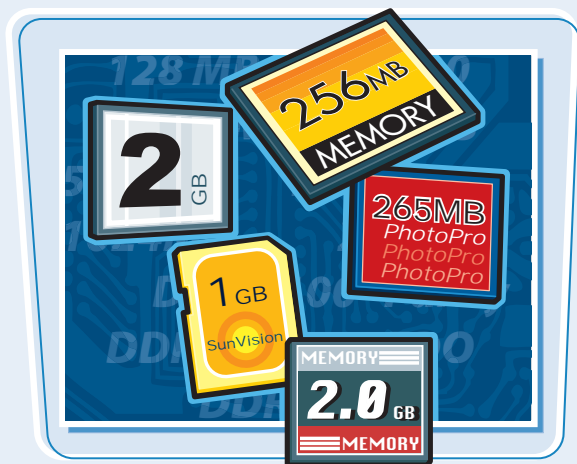
Understanding Memory Cards and Memory Card Readers

Photographers spend a lot of time and money selecting and preparing the camera and lenses. Digital cameras capture the photo data and store it on a memory card. The quality of the card as well as its proper use are very important factors for the security of your photo files.



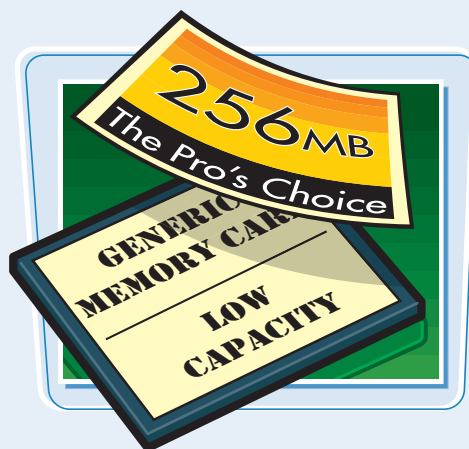
ABCs of Memory Cards

Each different digital camera uses a specific type of memory card, which can include Secure Digital (SD), CompactFlash (CF), x-D Picture Card (x-D), and Memory Stick (MS). Each type of card also comes in different speeds and size in megabytes or gigabytes of storage capacity.



Fake Memory Cards Warning

Relabeled and repackaged memory cards exist in the marketplace. Not only is the quality inferior, the cards may have a lower capacity than the labeled size, as well as an incorrect partition, increasing the likelihood of card corruption. Always purchase memory cards from known stores or reputable online vendors. A good camera is useless without a good quality memory card.



UDMA Memory Cards

UDMA cards (Ultra Direct Memory Access) cards, such as the Hoodman RAW UDMA card or Delkin Pro UDMA card, can write and transfer data significantly more quickly than standard memory cards when paired with UDMA-enabled cameras or card readers. Although only newer cameras utilize the UDMA protocol, you can use a UDMA memory card in non-UDMA cameras.

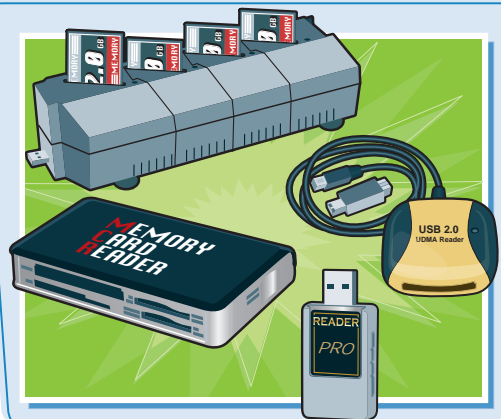


Use Memory Card Readers and Adapters

Using a card reader to download your files from the card to the computer is more convenient and safer than connecting the camera directly to the computer with a cable. Downloading your photos using a card reader is not only faster, it frees the camera to continue shooting with a different card during the transfer of the photos, may reduce the wear and tear on the camera terminals, and saves the camera batteries for shooting.

Types of Memory Card Readers

A card reader connects to your computer either by USB or FireWire and enables the inserted memory card to appear as an external device on the computer. UDMA-enabled card readers significantly reduce transfer time with UDMA cards. You can purchase single memory card readers with one slot for a specific type of memory card, multicard readers that accept several different types of cards, and even multislot readers to download up to four memory cards at once.



Using Memory Cards Correctly

Memory cards themselves are fairly rugged; however, they are electronic devices and are susceptible to corruption. Purchasing brand name cards from reputable resellers is the first step in protecting your photo files. You can avoid most problems and data loss by following simple guidelines for using and connecting memory cards.



Memory Card Size Selection

The type of media card you use depends on your camera manufacturer. You can select the size of your memory cards by the largest RAW or Large JPEG file size your camera creates, such that you can shoot between 75 and 100 shots on one card. In general, having multiple smaller capacity cards rather than one larger card for each project or trip provides a measure of safety in case a memory card is defective or corrupted.



Format and Reformat the Card in the Camera

Each camera has its own system and file structure. Always format a new card in the specific camera you are using. To format a card, insert it and turn on the camera settings to Format. When asked if you want to erase all the data on the card, click Yes to format the card. And always reformat the card in your camera before each use. Do not delete the photos with the computer to clear the card.



Insert and Remove Cards Safely

Always turn off the camera before inserting or removing a memory card. Never remove a card from a card reader or disconnect the cable while transferring files. Never force a card into the reader or camera slot.



Shoot Sequentially without Checking Images on a Computer

It is generally best to avoid taking a partially filled card out of the camera to check the files on a computer and then reinserting the card in the camera to continue taking photos. Also, do not take a partially filled card out of one camera and put it into another camera. You risk losing your photos and corrupting the card.



Avoid Filling Up a Memory Card

It is generally safer to leave some space, about two shots, at the end of each card. Some memory cards may get corrupted if they are trying to write a last file and there is not enough space.



Never Delete Photos in Camera at the End of a Card

Although you can generally delete files in the camera as you shoot, you should never delete the last files when a card is almost filled to make room for more shots. A full or almost full card is more fragile and susceptible to data loss.



Differentiating between Storage, Backups, and Archives

The number of files you create with digital photography expands very quickly. Lightroom keeps the catalog organized; however, you need a method of storing all those photos. And because the images exist in an electronic environment, you also need a backup, as well as an archive of your finalized images. Understanding the differences between these terms, often used synonymously, helps you establish a strategy so your files are always available and safe.



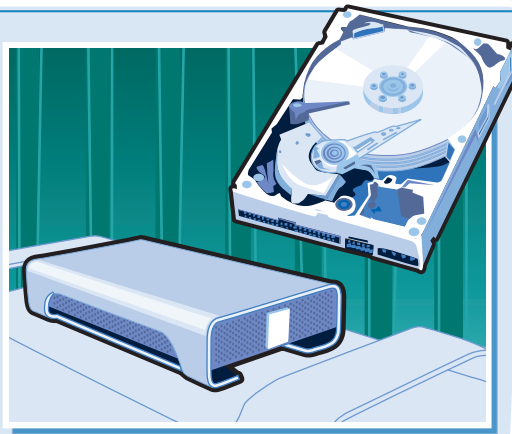
Storage

Storage generally refers to permanent mass data storage, such as the computer's internal hard drive where you download and save files to keep them readily available. RAM memory is a form of internal data storage, however, it is volatile and forgets what it had stored when the computer shuts down.



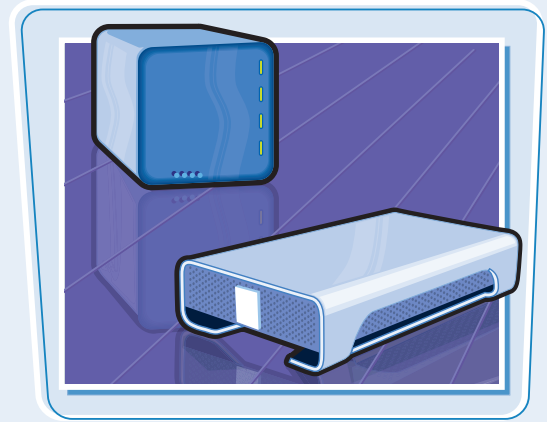
Storage Drive

A storage drive includes any hard drive or other device that keeps your files available so you can access them anytime. Using a large external storage hard drive works well with Lightroom to hold a growing photo library that might not fit on your internal hard drive. External storage can also include optical media, flash drives, and network drives.



Backup

A *backup* is a cumulative and regularly updated duplicate of your current files, saved on a separate hard drive, network, or other device, and used to restore the original files in case of file corruption, loss, or drive failure. Backups often include multiple versions of edited files. When you create a backup, you do not remove the files from the original location.

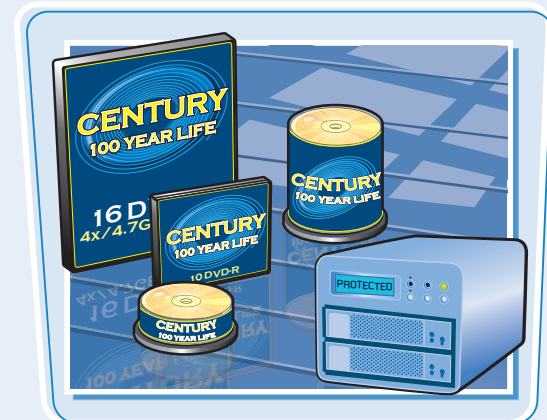


Backup Software

Backup software automates the process of copying your files and photos from your storage drive to the backup device, and simplifies restoration of the files if your main storage fails. Intego's Backup for Mac and NTI Shadow 3 for PC and Mac work in the background and automatically duplicate your most important files or all your files at the intervals you specify.

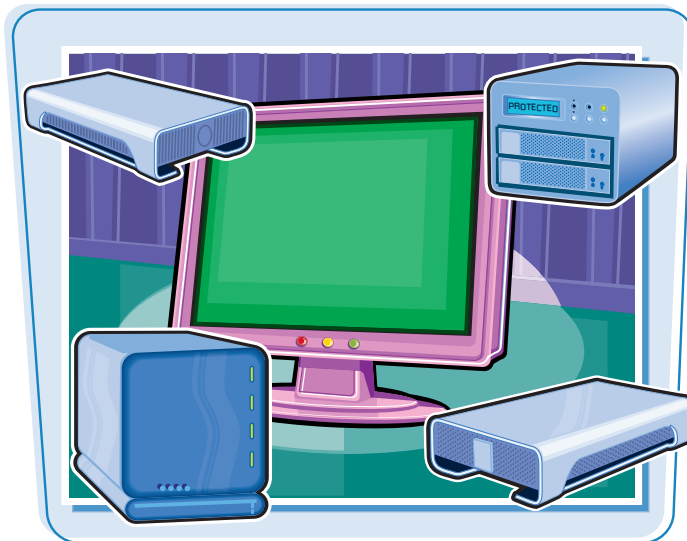
Archive

An *archive* consists of the finalized photos comprising a photographer's body of work. You can archive your finished photos, financial files, or other documents that need to be saved for future printing or record keeping. You do not edit archived data and the information does not need to be accessed regularly. Archives are stored on external drives or DVDs, and should generally be kept in separate locations, for example in a safety deposit box and in an office or home safe.



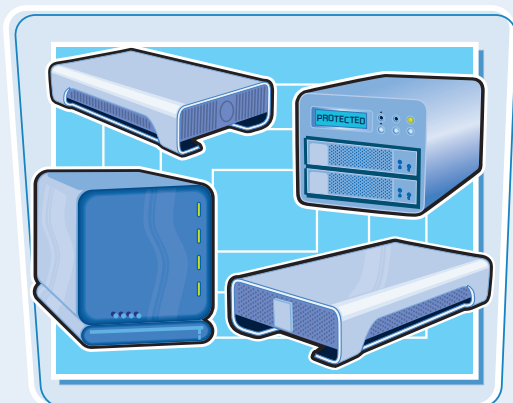
Understanding External Hard Drives

Hard drives come in different physical sizes, different capacities, different connection types, and different configurations. They include single drives, photo-specific copying and photo-viewing devices, and various RAID (Redundant Array of Independent Disks) options. Understanding how to select and use these hardware devices with Lightroom and your photo files can make a big difference in the security and longevity of your images.



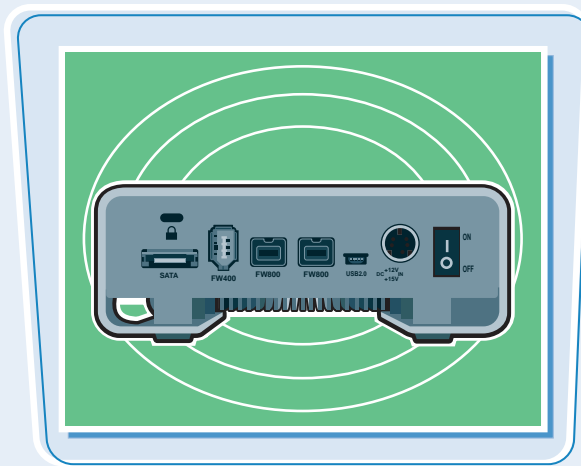
Hard Drive Options

External drives can be used for storage or archives, and are perfect for backups. The rotational speed, 5400 or 7200 RPM, describes how fast the data is read, written, and retrieved from the drive. Some options include single drives such as the G-Drive or G-Drive-Q, and RAID-type hardware systems such as the G-Safe (g-technology.com), and the Drobo system (www.drobo.com), which automatically place the data on multiple hard drives.



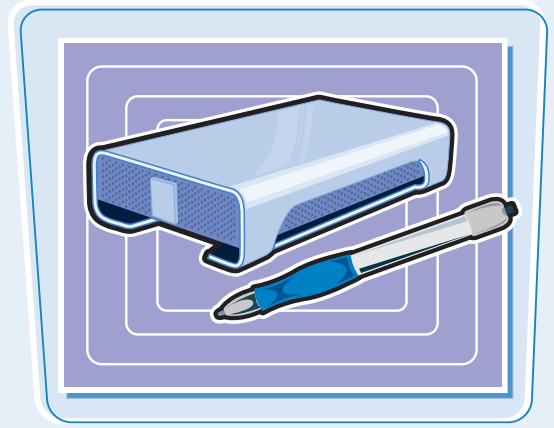
Cables and Connections

The most common hard drive connections are USB2, FireWire 400, and FireWire 800. Generally, USB is more available because of its lower cost, yet FireWire handles data transfers more efficiently and is better when you need to constantly access the drive. eSata connections are newer, and currently not as many computers include an external eSata port.



Travel Hard Drives

Although the small format external drives can be used anywhere, they are particularly useful when traveling with a laptop. Small drives can have large capacities and are bus powered, taking their power from the laptop and eliminating the need for an external power supply. Some such as the G-Drive mini include a protective carrying case.



Multipurpose Picture Viewer

A picture viewer is a portable, battery-operated hard drive with a built-in viewing screen. You can download photos from a memory card directly to a picture viewer without using a computer. Some picture viewers, such as the Picture Porter Elite (www.digitalfoci.com), also function as an MP3 player and a voice recorder, and can even connect to a television to both record videos from the TV or display a slide show of your images with a sound track.

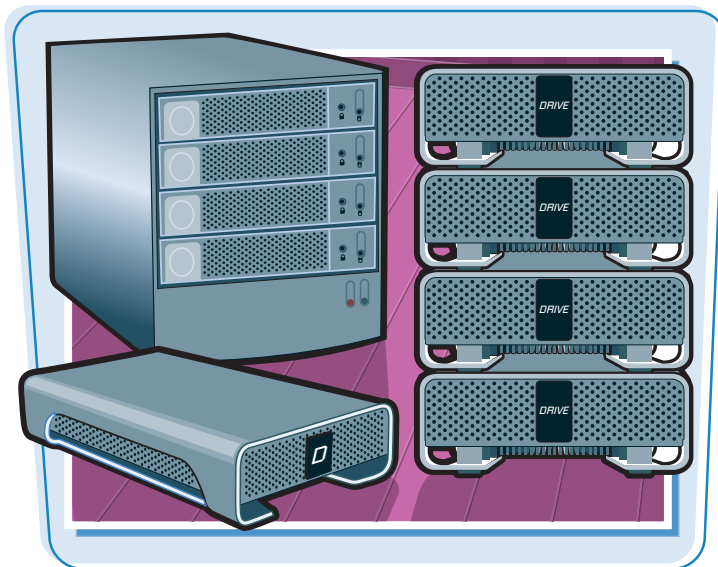
Photo-Centric Travel Hard Drive

Other portable photo storage devices combine a memory card reader and a portable hard drive without a viewing screen, making them essential photographic travel tools with or without a computer. Devices such as the Photo Safe II from Digital Foci (www.digitalfoci.com) can act as a memory card reader to transfer files to and from the computer, as well as copy and store your photos from the memory card.



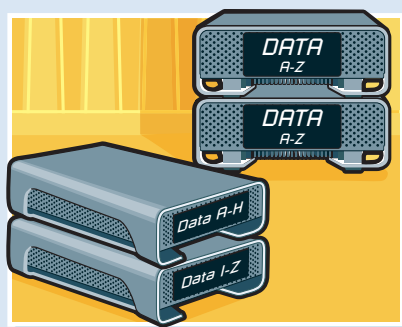
Defining Multidrive and RAID Systems

As your photo collection grows, so will your collection of storage and external drives. Multidrive systems or a RAID, Redundant Array of Independent Drives, offers more options for accessible storage, particularly for very large collections of photos and data. The different types of RAIDs are used for different purposes.



Striped and Mirrored Raid

A RAID is a grouped set of drives controlled by software or preferably hardware that appears as a single volume on your computer. Striped RAID (RAID 0) is used for faster reading and writing of data rather than data protection, as each drive copies parts of the data at the same time. Mirrored RAID (RAID 1) copies a mirror image of the first drive onto a second drive, creating a redundant system. If one drive fails, you can replace it and the RAID automatically rebuilds the new drive to mirror the existing drive.

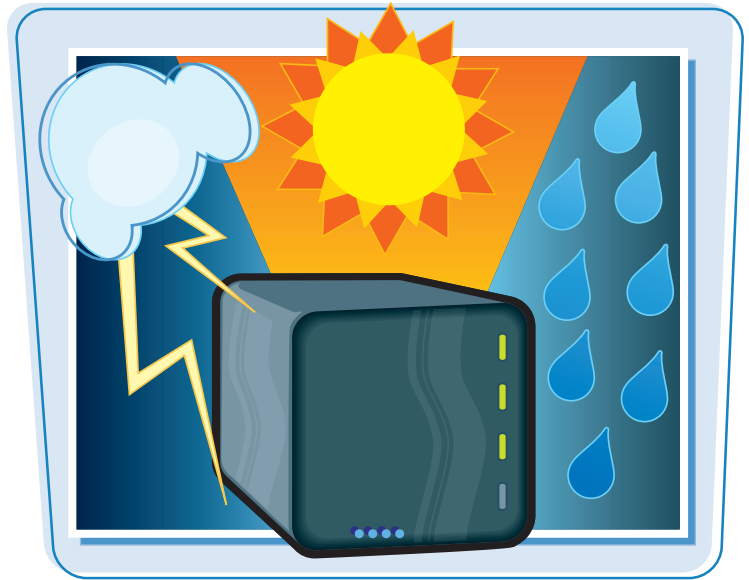


Drobo-Managed Storage or Backup System

The Drobo from Data Robotics (www.drobo.com) is a special proprietary type of storage device using multiple drives in an automated and expandable system. You can replace a drive if it fails or add larger capacity hard drives as your storage needs grow, and the Drobo manages the data, moving files to the new drives. Rather than mirror images of one another, the Drobo unit efficiently maintains all the data across all the drives.

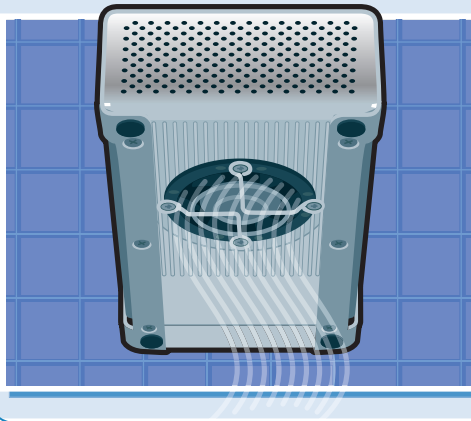


You rely on these drives to store or restore your important files and photos. Hard drives, both internal and external, can eventually fail, which is why you must always have a backup. However, following a few guidelines, including not bumping or turning the drive upside down when it is running, can improve the reliability of your storage and backup system.



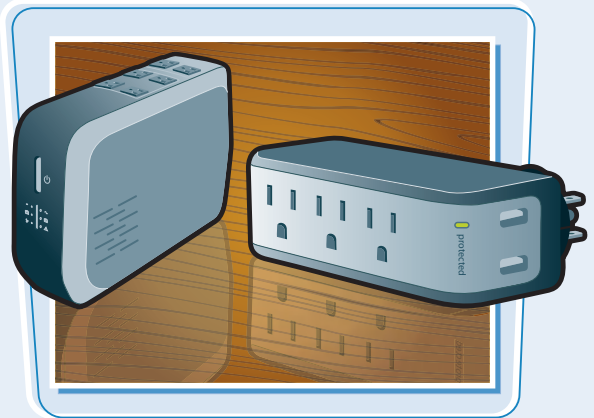
Heat and the Hard Drive

Hard drives get hot as they spin to access data. The type of enclosure is crucial to preserving your data and the reliability of the drive. A metal enclosure can dissipate heat better than a plastic one, and drives with metal enclosures plus a built-in heat sync or a fan, as in the G-Tech and Drobo units, remain cooler and generally work longer.



Keeping Power Consistent

Surges, spikes, and sudden loss of power can damage any hard drive. Always connect your computer and external drives to a UPS, an uninterruptible power supply, such as the Belkin UPS with AVR (www.belkin.com) for voltage regulation. To power a laptop or charge any unit when traveling, use a small surge suppressor to at least avoid the surges and spikes that pass through the electrical lines.



Understanding Travel Essentials with a Digital Camera

In addition to the camera, you should travel with multiple memory cards, spare camera batteries or the battery charger, and a mini surge suppressor. You should also have two separate forms of photo storage to make copies of your photos while traveling.



Traveling with a Laptop

If you travel with a laptop, you can download photos from memory cards to the laptop's hard drive. You should also carry a card reader to transfer the photos as well as some type of external travel hard drive to store duplicates. Make sure the travel drive is bus-powered, protected in a case, and that you carry the appropriate USB or FireWire cable.



Mini Travel Hard Drive

You can connect a card reader and a travel drive to the laptop and copy the contents of the memory cards to both the internal and external drive. If you import photos directly using Lightroom you can set the preferences to automatically back up the images to the external drive upon import. Lightroom then creates two sets of photo files, one on the internal drive and one on the external hard drive. See Chapter 2 for the steps to import and back up your photo files.



Multipurpose Travel Drive

Using a picture viewer such as the Picture Porter Elite, you can copy the photos from the memory cards and also copy them to the laptop, creating two separate copies of your photos. You can also preview the photos anytime on the viewer without starting up the laptop, and even view them on a television.



Photo-Storage Travel Hard Drive

You can travel with a drive such as the Photo Safe II and use it as both a card reader to copy the photos from the memory cards to the laptop's hard drive, and as an external drive for downloading and storing a duplicate set of images. Such a unit can be recharged with a power adapter or directly from the computer using the USB cable.

Traveling without a Laptop

In this electronic universe you need to have a backup, even when on the road. If you travel without a laptop, consider using a picture viewer and a second photo storage device, such as the Photo Safe II. Carrying two such multipurpose travel hard drives is more economical and practical than purchasing as many gigabytes of memory cards, and you will always have duplicate sets of photos.



Using an Online Storage System

Even if you regularly back up your photos, catalogs, and other files to separate hard drives, you can still lose files in case of corruption, a natural disaster, or theft. A fire could destroy your main files and your backups. Adding an online storage system to your backup strategy increases your level of security and can save you time after such a disaster.



What Is Online Storage?

Online storage from companies such as Mozy is a service that enables you to use the Internet to back up remotely to a server somewhere else, creating insurance for your valuable files. Using a high-speed Internet connection and the software from the service, you can back up and store your entire hard drive or just specific folders to the service's large online drives.



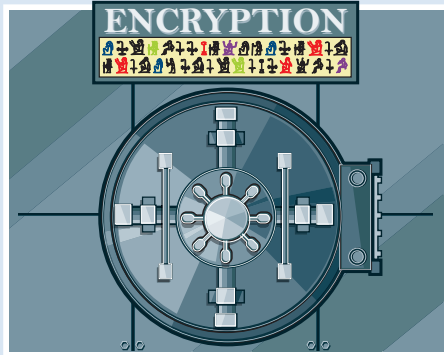
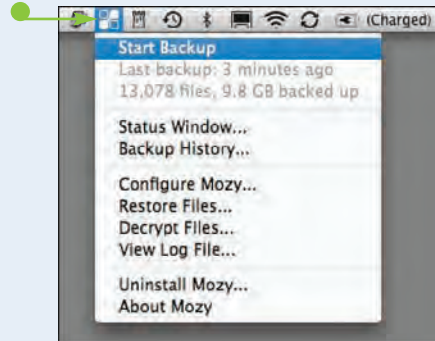
Monthly Fees

Although such a service used to be quite costly and complicated, some companies such as Mozy (www.mozy.com), for both Macs and PCs, and Fabrik (www.fabrik.com), for PCs, have established simple-to-use and unlimited online storage, for less than \$5.00 a month, and even offer a free account limited to 2GB of storage, which is enough to back up many text and financial documents.



Backup Application

To use the online service, you first download and install a small company-specific application (●). You then select the files and folders on your computer to back up, and set a time and interval for the backups. The initial backup can take a long time depending on the size of the files you selected. After that, the application works constantly in the background checking for files that are changed or added.

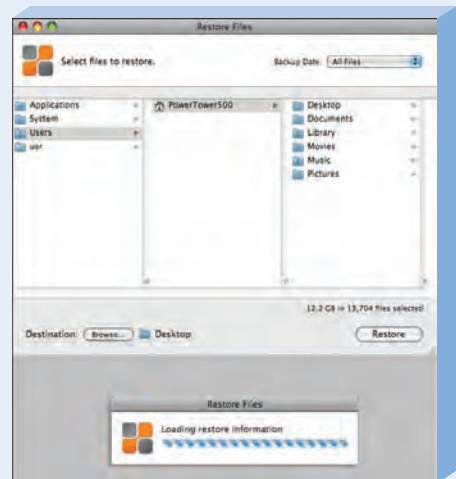


Security

Your files are encrypted during the back-up process and again while in storage. You use a secured password to access your data on the servers.

Restoring Your Files

After any loss, accidental deletion, or corruption, you can click to select the files to restore using the service's back-up application. You can also restore using the Web by logging in and selecting the files to be downloaded, and even opt to have the restore files mailed to you on DVD for a fee.



Index

A

ACR (Adobe Camera Raw), 230
Adobe RGB, *versus* ProPhoto RGB, 113
altering photos with presets, 146
ambient lighting, measuring, 139
applying metadata, 119
archives, 321
Attribute filters, 60
Auto Mask, localized adjustments, 217
Auto Tone, change, 152–153

B

background, fill color, 113
backups
 catalog, 7
 import and, 50–51
 location, 23
 overview, 321
 photo files, 7
 software, 321
black and white levels of monitor, 140
black and white photos, converting to from color, 210–211
black line surrounding photo to print, 261
Bridge, Lightroom comparison, 292–293

C

calibrating camera, 230–231
calibrating monitor
 definition, 135
 frequency, 140
 hardware-based, 136
 measuring device, 138–139
 need for, 134
 software only, 136
camera
 calibration, 230–231
 connecting via cable, 31
 traveling with, 326–327
 white balance, 151
Camera Calibration pane, 232–233
camera-induced vignetting, 227
Cast Shadow, slideshows, 243
catalog
 backups, 7
 creating, 44–45
 deleting, 19
 growth, 7
 locating, 16–17
 metadata, 119
 photo collection, 6
 practice, 14–15

presets and, 111
removing photos, 18–19, 104
saving, location, 29
settings, 114–115

Catalog section, Library module, 62
CDs, burning, 287
central content area, image viewing, 8
central viewing area, enlarging, 12–13
CF (CompactFlash) memory card, 316
chromatic aberration, 222–223
clarity, 200
Clarity tool, Tone Control pane, 154
clipped highlights, removing, 198
clipped shadows, lightening, 198
clipping in histogram, 145
Collection Sets, group collections in, 90–91
collections
 adding photos from Print module, 257
 adding to existing, 87
 creating, 86
 deleting photo, 105
 moving between Collection Sets, 91
 naming, 86
 photos in multiple, 87
 Quick Collections, 92–93
 removing photos from, 87
 Smart Collections, 88–89
 viewing multiple, 91
 Web module, 278–279

Collections section, Library module, 62
color

 adjusting individual, 208–209
 color pane sliders, 209
 converting to black and white, 210–211
 hue, 207–208
 luminance, 207–208
 reverting to from grayscale, 211
 saturation, 207–208
 stroke color, 255

color casts in photos, 151, 193
Color Management, 270–271
Color noise, 220
Color slider, digital noise, 221
color space settings, 297
color temperature for monitor, 139–140
colorimeter, 136–137
ColorMunki spectrophotometer, 137
Compact Cells, 72
Compare view, 64
contact proof sheets, identity plate, 129
contact sheets, 256–257

contrast

- Clarity tool, 154
- histogram, 145

copying edits between photos, 177

copying photos, virtual copies, 158–159

copyright symbol

- adding to Web page, 283
- exporting files and, 311
- metadata preset, 124–125
- typing, 123

Crop tool, 182–183

cropping photos

- crop ratio, 184–185
- for effect, 184–185
- presets and, 147
- recompose photos, 182–183

Custom filters, 60

D

data files, edits, 22

Develop module, 10–11

- adjustment tools, 162
- Basic section, 162
- Before/After views, 170–171
- Camera Calibration section, 163
- central viewing area, 162
- comparing images, 170–171
- Copy button, 162
- Detail section, 163
- Filmstrip, 163
- Filmstrip toolbar, 163
- histogram, 162, 178–179
- History section, 162
- HSL/Color/Grayscale section, 163
- interface changes, 164–165
- Navigator section, 162
- Paste button, 162
- presets, 168–169
- Presets section, 162
- Previous button, 163
- Reset button, 163
- rotating photos, 176
- sharpening in, 225
- shortcuts, 166–167
- Snapshots section, 162
- Split Toning section, 163
- Tone Curve section, 162
- toolbar, 162
- Vignettes section, 163
- white balance, 195

digital light table, viewing photos on, 5

digital noise, 220–221

DNG files

- advantages, 27
- changing to, 32–33
- moving between Lightroom and Photoshop, 298–299
- size, 33

downloading directly from camera, 31

Drobo storage/backup system, 324

DVDs, burning, 287

dynamic range of histogram, 144

E

e-mail

- photo attachments, 310–313
- Web pages, 281

editing photos

- copying edits between, 177
- data files, 22
- red eye removal, 188–189
- repairing, 186–187
- saving changes, location, 17

editors, external, 296–297

Elements

- Lightroom and, 5
- Lightroom comparison, 294–295
- moving images to/from Lightroom, 300–301

enlarging central viewing area, 12–13

EXIF metadata, 118, 121

Expanded Cell Extras, F-Stop, 73

Expanded Cells, 72

Export button, Library module, 62

exporting

- Export buttons and, 307
- from modules, 306–307
- photo attachments to e-mail, 310–313
- presets, 229
- slideshows to PDF, 249
- Web Gallery, 286

exposure

- arrows, 153
- Auto feature, 197
- modify basic, 196–197
- as overlay, 73
- values, 197

external editors, preferences, 296–297

external hard drives, 52–55, 322–323

F

F-Stop, Expanded Cell Extras, 73

Fabrik online storage, 328

fake memory cards, 316

Index

file formats, 26–27

file growth, 7

file names

- naming practices, 34–35
- naming template presets, 40–43
- setup, 25
- template resets, 38–39

Fill Light, shadow areas, 153

Filmstrip

- deselecting photos, 261
- hide/show, 13, 165
- Library module, 61
- multiple photos selected, 169
- thumbnails, 8

Filmstrip tools, Library module, 61

Filter menu, Library module, 61

filtering photos, 80–81

Flash gallery, HTML gallery comparison, 279

folders

- deleting, 83
- Pictures, 17
- setup, 25
- subfolders, 82–83
- synchronizing, 84–85

Folders section, Library module, 62

fonts, module buttons, 128–129

formatting memory card, 318

G

gamma setting for monitor, 139

Graduated Filter tool, 218–219

graphical identity plates, 130–131

grayscale

- changing, 148
- previewing, 207
- reverting images to color, 211

Grid view

- expanded grid cells, 73
- Library module, 60
- second window, 69
- sort photos, 81

Grid view button, Library module, 61

groups, renaming, 76–77

H

hard drives

- deleting photos, 104
- external, 7, 322–323
- heat and, 325
- multidrive systems, 324–325
- picture viewers, 323

power, 325

RAID, 324–325

travel, 323, 326–327

hardware-based monitor calibration, 136–137

hide/show

- Filmstrip, 13
- Library module toolbar, 75
- menu bar, 164
- panels, 13
- picker bar, 164
- title bar, 164
- toolbar, 13, 165

hierarchical keyword lists, 101

High Dynamic Range, 303

highlights, clipped, 198

histogram

- clipped area, warning triangles, 179
- clipping, 145
- contrast, 145
- Develop module, 178–179
- dynamic range, 144
- sliders, 179
- tonal range, 145

Histogram, Library module, 62

History, 172–175

HSL tools, 206

HSL/Color/Grayscale tools, 206

HTML gallery, Flash gallery comparison, 279

Hue sliders, 206

I

Identity Plate, interface and, 8

Identity Plate Editor, 126–127

identity plates

- contact proof sheets, 129
- create, 126–127
- graphical, 130–131
- slides, 245

image stack, 102–103

importing

- automating process, 48–49
- backups and, 50–51
- downloading directly from camera, 31
- from existing catalog, 46–47
- keywords, 25
- metadata, 25
- move photos, 25
- photos, current location, 28–29
- photos, location, 17
- photos, from memory card, 30–31
- photos, selected, 15

- presets, 169
- RAW files and convert to DNG, 32–33
- renaming, 36
- renaming after, 37
- renaming photos, 25
- source images location, 24

Import button, Library module, 62

interface

- central viewing area, 8
- consistency, 9
- customizable, 9
- Filmstrip, 8
- left panel, 8
- main menu bar, 8
- platform independence, 9
- right panel, 8
- Toolbar, 8
- top panel, 8

IPTC metadata, 118

ISO, as overlay, 73

J

JPEG files

- description, 26
- printing, 265
- save as, 265
- white balance and, 193

K

keyboard shortcuts

- Develop module, 166–167
- exporting and, 309
- filter photos, 81
- tag photos, 81
- views, 117

Keyword List section, Library module, 62

Keywording section, Library module, 62

keywords

- adding to photos, 96–97
- custom keyword sets, 100–101
- hierarchical lists, 101
- Painter tool and, 98–99
- Smart Collections, 89
- suggested, 101
- thumbnails, 101

L

Library, items saved in, 22

Library module, 10–11

- Catalog section, 62
- Change thumbnail size, 60

- Collections section, 62
- enlarging central viewing area, 12–13
- Export button, 62
- Filmstrip, 61
- Filmstrip tools, 61
- Filter menu, 61
- Folders section, 62
- Grid view, 60
- Grid view button, 61
- Histogram, 62
- Import button, 62
- Keyword List section, 62
- Keywording section, 62
- Main button, 61
- metadata and, 120–121
- Metadata section, 63
- navigation buttons, 61
- Navigator section, 62
- Painter tool, 60
- Panel end marks, 63
- photo locations, 61
- Quick Develop section, 62
- scroll bar, 60, 63
- second window button, 61
- Select sort parameters, 60
- sharpening in, 225
- Survey view, 65
- Sync Metadata, 63
- Sync settings, 63
- toolbar, 60, 74–75
- Top Filter bar, 60
- View mode, 60
- View Options, 72–73
- views, 64–65
- white balance, 195

Lightroom

- Bridge comparison, 292–293
- as database, 4, 293
- Elements comparison, 294–295
- moving DNG files to Photoshop and back, 298–299
- moving images to/from Photoshop or Elements, 300–301
- moving RAW files to Photoshop and back, 298–299
- open, 10–11
- as organizational tool, 5
- Photoshop actions, 313
- Photoshop and, 5
- Photoshop comparison, 294–295
- Photoshop Elements and, 5
- prompt when starting, 111
- as virtual darkroom, 4

localized adjustments, 216–217

Index

Loupe view, 64, 67

lighting, 70

selecting, 116

Show Info Overlay, 73

toolbar tools, 75

Luminance noise, 220

Luminance sliders, 206

M

Main button, Library module, 61

main menu bar, 8

measuring ambient lighting, 139

memory cards

adapters, 317

CF (CompactFlash), 316

fake, 316

filling up, 319

formatting, 318

full, 319

import from, 30–31

inserting, 319

MS (Memory Stick), 316

readers, 317

removing, 319

SD (Secure Digital), 316

shooting sequentially, 319

sizes, 318

UDMA (Ultra Direct Memory Access), 317

x-D (x-D Picture Card), 316

menu bar, hide/show, 164

metadata

applying, 119

benefits, 123

catalog and, 119

copyright symbol, 124–125

EXIF, 118

IPTC, 118

Library module and, 120–121

presets, 124–125

saving with photo files, 119

synchronizing between photos, 122–123

Metadata filters, 60

Metadata pane, 122

Metadata section, Library module, 63

mirrored RAID, 324

module buttons, modify, 128–129

Module Picker, tools and, 8

modules

Develop, 10–11

exporting from, 306–307

Library module, 10–11

Print, 11

Slideshow, 11

Web, 11

monitor

black and white levels, 140

calibration, 134–136

color temperature, 139–140

colorimeter, 136

environment surrounding, 135

gamma setting, 139

profiling, 134–135

quality, 134

spectrophotometer, 136

white point, 140

Mozy online storage, 328

MS (Memory Stick) memory card, 316

multidrive systems, 324–325

N

name collections, 86

name files, 34–35

navigation buttons, Library module, 61

Navigator section, Library module, 62

neutral color, selecting, 195

NTI Shadow, 7

O

online storage, 328–329

open Lightroom, 10–11

open, welcome screens, 11

output settings, Web module, 283

P

Painter tool

keywords and, 98–99

Library module, 60

Panel end marks, Library module, 63

panels, hide/show, 9, 13

panoramas, 302–303

password, Web Gallery and, 289

PDF files, exporting slideshows to, 249

personal identity plates, 126–127

photo collages, 301

photo collection, catalog and, 6

photo files

backups, 7

location, 23

photo locations, Library module, 61

photos

copying edits between, 177

deleting from hard drive, 104

filtering, 80–81

- group rename, 76–77
 - import selected photos, 15
 - keywords, 96–97
 - removing from catalog, 104
 - repairing, 186–187
 - saving metadata with, 119
 - sizing, 309
 - straightening images, 180–181
 - tagging for sorting, 78–79
 - viewing in grid, 73
- Photoshop**
- actions in Lightroom, 313
 - Lightroom and, 5
 - Lightroom comparison, 294–295
 - moving DNG files to and from, 298–299
 - moving images to/from Lightroom, 300–301
 - moving RAW files to and from, 298–299
 - Open as Layers, 303
 - panoramas, 302–303
 - renaming edited files, 299
- Photoshop Lightroom.** *See* **Lightroom**
- picker bar, hide/show, 164**
- Picture folder**
- catalog, 22
 - photo files, 22
 - previews, 22
- picture packages**
- bleed area, 269
 - custom, 268–269
 - printing, 266–267
 - removing pages/cells, 269
- Picture Porter Elite, as external drive, 52, 323**
- picture viewers, 323**
- Pictures folder, 17**
- playing slideshows, impromptu, 238–239**
- Plug-in Manager, 311**
- Point Curve arrow, tone curve, 205**
- practice catalog, 14–15**
- preferences**
- external editors, 296–297
 - Preferences dialog box, 110–111
 - presets and, 108
 - setting, 110–113
- presentations, 5**
- presets**
- altering photos with, 146
 - cropping with, 147
 - custom, 109, 228–229
 - default, 109
 - deleting from list, 169
 - Develop module, 168–169
 - Export, e-mail attachments and, 310–313
 - exporting, 229
 - importing, 169
 - installing, 109
 - metadata, 124–125
 - preferences and, 108
 - reasons for, 108
 - storing with catalog, 111
 - third-party, 109
 - white balance, 192
- Print module, 11**
- adding photos to collections, 257
 - Collections pane, 252
 - Filmstrip, 253
 - Guides pane, 252
 - Image Settings pane, 252
 - Layout Engine pane, 252
 - Layout pane, 252
 - Overlays pane, 252
 - Page Setup button, 252
 - previewing, 252
 - Print button, 253
 - Print Job pane, 253
 - Print One button, 253
 - Print Settings button, 252
 - sharpening in, 225
 - Template Browser, 252
 - toolbar, 252
- Print One, 255**
- print templates, 262–265**
- printing**
- adding identity plate, 258
 - black line surrounding photo, 261
 - contact sheets, 256–257
 - JPEG files, 265
 - options, 5
 - overlay graphics and, 258–261
 - overlay text and, 258–261
 - picture packages, 266–267
 - resizing images, 267
 - templates and, 254–255
 - watermark as overlay, 260
- profile monitor, 134–135, 138–139**
- prompt when starting Lightroom, 111**
- ProPhoto RGB, *versus* Adobe RGB, 113**
- PSD files, 27**
- publishing Web Gallery, 288–289**
- Q**
- Quick Collections**
- convert to permanent, 94–95
 - create, 92–93
 - remove photos, 95

Index

Quick Develop pane, 146, 156–157
Quick Develop section, Library module, 62

R

RAID (Redundant Array of Independent Drives), 324–325
RAW files
 advantages, 27
 converting to DNG, 32–33
 description, 26
 moving between Lightroom and Photoshop, 298–299
 size, 33
 white balance, 193
Recovery, highlights, 153
red eye removal, 188–189
remove photos, from catalog, 18–19
renaming
 after importing, 37
 groups of photos, 76–77
 imported photos, 25
 subfolders, 83
repair photos, 186–187
Reverse sort order, Library module, 60
right panel, 8
rotate photos in Develop module, 176

S

saturation
 adjusting, 201
 Vibrance and, 154
Saturation sliders, 206
scroll bar, Library module, 60, 63
SD (Secure Digital) memory card, 316
second window button, Library module, 61
second window viewing, 66–69
Select sort parameters, Library module, 60
shadows
 Cast Shadow, slideshows, 243
 clipped, 198
sharpening
 details and, 224
 Develop module, 225
 Library module, 225
 Print module, 225
side panels
 arranging, 71
 behavior, 65
Slideshow module
 Backdrop pane, 237
 Collections pane, 236
 export buttons, 236
 introduction, 11
 Layout pane, 236
 Options pane, 236
 Overlays pane, 236
 Play button, 237
 Playback pane, 237
 preview, 236
 Preview button, 237
 Slide Editor, 236
 Template Browser, 236
 Titles pane, 237
 toolbar, 236
slideshows
 Cast Shadow option, 243
 exporting to PDF, 249
 identity plate on slides, 245
 playing impromptu, 238–239
 previewing in full screen, 241
 Smart Collections, 241
 soundtracks, 245
 templates, 240–241
 templates, customizing, 242–245
 templates, saving custom, 248
 text overlays, 246–247
Smart Collections
 creating, 88–89
 keywords, 89
 slideshows, 241
Smart Object (Photoshop), 303
Snapshots, 173–175
software-only-based monitor calibration, 136
sorting photos
 Grid view, 81
 tagging, 78–79
soundtrack to slideshows, 245
spectrophotometer, 136–137
Split Toning pane, 212–213
Spot Removal tool, 186–187
storage
 growth, 7
 online, 328–329
 overview, 320
storage drives, 83, 320
straighten images, 180–181
striped RAID, 324
subfolders, 82–83
Survey view, 65
Sync Metadata, Library module, 63
Sync settings, Library module, 63
synchronizing
 folders, 84–85
 metadata between photos, 122–123

T

tagging photos for sorting, 78–79

Targeted Adjustment tool

- hue, 208

- luminance, 208

- resetting sliders, 207

- saturation, 208

- tone curve, 204

- toolbar, 211

temperature, white balance, 194–195

templates

- creating, Web Gallery, 278–279

- custom, Web Gallery, 280–283

- deleting, 285

- external editors and, 297

- printing and, 254–255

- saving, Web Gallery, 284–285

- slideshows, 240–241

- slideshows, custom, 242–245

- slideshows, saving custom, 248

Text filters, 60

text overlays, slideshows, 246–247

third-party presets, 109

thumbnails, keywords, 101

TIFF files, 26

tint, white balance, 194–195

tinting photos, 212–213

title bar, hide/show, 164

tonal adjustments tools, 198–199

tonal range of histogram, 145

Tone Control pane, 154–155

tone curve

- adjusting directly, 202

- effects, viewing, 205

- ghosted region when moving point, 203

- resetting adjustments, 203

- sliders, 203

- Targeted Adjustment tool, 204

Tone sliders, 199

toning images, 212–213

toolbars

- hide/show, 13, 165

- Library module, 60, 74–75

- modules, 8

- Print module, 252

- Slideshow module, 236

- Web Gallery, 275

Top Filter bar, Library module, 60

top panel, 8

travel catalog, main library and, 56–57

travel hard drives, 323, 326–327

triangles on screen, 281

U

UDMA (Ultra Direct Memory Access) memory cards, 317

uploading, Web Gallery, 288–289

V

vibrance, 201

Vibrance, Tone Control pane, 154

View mode, Library module, 60

View Options, Library module, 72–73

views, 116–117

vignettes, 226–227

virtual copies, compare edits, 158–159

virtual darkroom, Lightroom as, 4

W

watermarks

- adding to Web page, 283

- description, 260

- exporting files and, 311

Web Gallery

- exporting, 286

- introduction, 5

- password, 289

- template creation, 280–283

- templates, 278–279

- templates, deleting, 285

- templates, previewing, 284

- templates, saving, 284–285

- testing in browser, 287

- toolbar, 275

- uploading, 288–289

Web module, 11

- Appearance pane, 276

- collections, 278–279

- Collections pane, 274, 278–279

- Color Palette pane, 276

- Engine pane, 276

- Export button, 277

- Image Info pane, 276

- Main Gallery, 274

- Output Settings pane, 276, 283

- Preview, 274

- Preview in Browser button, 274

- scroll bar, 274

- Site Info pane, 276

- Template Browser, 274, 278–279

- Upload button, 277

- Upload Settings pane, 277

Web pages, e-mail, 281

welcome screen, 11

Index

white balance

- adjust, 192–195
- camera, 151
- change, 149
- color casts and, 193
- Develop module, 195
- JPEG files, 193
- Library module, 195
- presets and, 192
- RAW files, 193

- selector, 193
- setting changes, 150–151
- temperature, 194–195
- tint, 194–195

white point for monitor, 140

X–Y–Z

x-D (x-D Picture Card) memory card, 316

XMP files, 27